NAVAL TACTICS, TECHNIQUES AND PROCEDURES FOR

PATIENT MOVEMENT

NTTP 4-02.2

(Formerly NWP 4-02.2 PART A)

MCWP-4-11.2

DEPARTMENT OF THE NAVY
OFFICE OF THE CHIEF OF NAVAL OPERATIONS

PRIMARY REVIEW AUTHORITY:

CHIEF, BUREAU OF MEDICINE AND SURGERY

ORIGINAL

DEPARTMENT OF THE NAVY

NAVAL TACTICAL PUBLICATIONS

NAVAL WAR COLLEGE

686 CUSHING ROAD

NEWPORT, RI 02841

July 2000

LETTER OF PROMULGATION

1. NTTP 4-02.2, NAVAL TACTICS, TECHNIQUES AND PROCEDURES FOR PATIENT MOVEMENT, is an Unclassified naval warfare publication. It shall be handled by Department of the Navy holders in accordance with the administrative procedures contained in NWP 1-01.

		July 2000
	PUBLICATION NOTICE	
		ROUTING
NTTP 4-02.2, NAVAL TACTICS, TECHNIQUES AND PROCEDURES FOR PATIENT MOVEMENT, is available in the Naval Warfare Publications Library. It is effective upon receipt.		
Summary:		
a.	The purpose of NTTP 4-02.2 is to provide a general summary of patient movement.	
b.	This publication has been updated with current information throughout.	
c.	The intended audience includes operational (supported) commanders, supporting commanders, planners and logisticians, and Health Service Support personnel.	
	Naval Warfare Publicat	ions Custodian

Naval Warfare publications must be made readily available to all users and other interested personnel within the U.S. Navy.

Note to Naval Warfare Publications Custodian

This notice should be duplicated for routing to cognizant personnel to keep them informed of changes to this publication.

(Reverse Blank)

This page intentionally blank.

RECORD OF CHANGES

Date of Entry	Page Count Verified
	by (Signature)
	Date of Entry

Patient Movement

CONTENTS

	Page
	No.
СНАРТ	ER 1 – INTRODUCTION
1.1	HEALTH SERVICE SUPPORT GOAL
1.2	HEALTH SERVICE SUPPORT PROCESS
СНАРТ	ER 2 – PATIENT MOVEMENT PLANNING
2.1	CURRENT HSS DOCTRINE
2.2	LEVELS OF CARE
2.3	FUNDAMENTALS OF HEALTH SERVICE SUPPORT PLANNING
2.4	THEATER EVACUATION POLICY
2.4.1	Determining Theater Evacuation Policy
2.4.2	Command, Control, Communications, Computers (C4) System
2.4.3	Patient Movement Items
СНАРТ	ER 3 - PATIENT MOVEMENT
3.1	GENERAL
3.2	BASIC CONSIDERATIONS
3.2.1	Triage/Sorting
3.2.2	Triage Category Codes
3.2.2.1	Immediate Treatment (Group T1)
3.2.2.2	Delayed Treatment (Group T2)
3.2.2.3	Minimal Treatment (Group T3)
3.2.2.4	Expectant Treatment (Group T4)
3.2.2.5	Deceased (T5)
3.3	PATIENT EVACUATION
3.3.1	Basic Tenets for Patient Evacuation

3.3.2	Planning for Patient Evacuation
3.3.3	Intratheater (Tactical) Evacuation
3.3.3.1	Ground Evacuation
3.3.3.2	Aeromedical Evacuation
3.3.3.3	Sea (Waterborne) Evacuation
3.3.4	Inter-theater (Strategic) Evacuation
3.4	MEDICAL REGULATING
3.4.1	Planning Factors for Medical Regulating
3.4.2	Factors Affecting Medical Regulating
3.4.3	Contingency Medical Regulating
3.4.4	Wartime Medical Regulating
3.5	PATIENT MOVEMENT AGENCIES
3.5.1	Global Patient Movement Requirements Center
3.5.2	Theater Patient Movement Requirements Center
3.5.3	Medical Regulating Control Center
3.6	MEDICAL REGULATING INFORMATION MANAGEMENT SYSTEMS
3.6.1	Defense Medical Regulating Information System
3.6.2	Theater Army Medical Management Information System MEDREG Subsystem
3.6.3	USTRANSCOM'S Regulating and Command and Control Evacuation System
	(TRAC2ES)
СНАРТ	TER 4 – COMMUNICATIONS
4.1	GENERAL
4.2	COMMUNICATIONS REQUIREMENTS
4.3	COMMUNICATIONS NET
4.3.1	Net Control
4.4	THE MEDICAL REGULATING NET
СНАРТ	ER 5 – PATIENT MOVEMENT OPERATIONS
5.1	PATIENT MOVEMENT AT SEA
5.2	PATIENT MOVEMENT EN ROUTE TO AN AREA OF OPERATIONS
5.3	PATIENT MOVEMENT DURING AMPHIBIOUS OPERATIONS

5.3.1	Health Service Support During Amphibious Operations
5.3.2	Basic Concepts of Patient Movement Execution
5.3.3	Medical Regulating Operations
5.3.4	Patient Movement Responsibilities During Amphibious Operations
5.3.4.1	Preparation Phase
5.3.4.2	Initial Assault Phase
5.3.4.3	Build-Up and Consolidation Phase
5.3.4.4	Termination of Amphibious Operations
5.4	PATIENT MOVEMENT IN JOINT AND COMBINED OPERATIONS
5.4.1	Interface with United States Army (USA)/United States Air Force (USAF)
5.4.2	Interface with Combined Forces
5.5	PATIENT MOVEMENT EXECUTION IN MILITARY OPERATIONS OTHER
	THAN WAR (MOOTW)
5.5.1	Interface with Host Nations
5.5.2	Interface with United Nations Forces/Allies
5.6	PATIENT MOVEMENT CONSIDERATIONS FOR SPECIAL
	OPERATIONS COMMAND
5.7	CONCEPTS OF JOINT PATIENT MOVEMENT OPERATIONS
5.7.1	Intra-Theater Patient Movement Operations
5.7.2	Inter-Theater Patient Movement Operations
5.8	TRANSPORT OF CASUALTIES OF CHEMICAL / BIOLOGICAL /
	RADIOLOGICAL EXPOSURE
0114.07	
CHAPII	ER 6 - POSTDEPLOYMENT CRITIQUES AND LESSONS LEARNED
6.1	GENERAL
6.2	POSTDEPLOYMENT CRITIQUES
6.3	LESSONS LEARNED
APPEN	DIX A – PATIENT EVACUATION
A.1	PATIENT EVACUATION

APPENDIX B – ARMED FORCES TRANSPORTATION ASSETS

APPENDIX E – MEDICAL REGULATING TEMPLATES AND REPORTS	
APPENDIX F – POST-DEPLOYMENT CRITIQUE	
APPENDIX G – LESSONS LEARNED PROCESS	

LIST OF ILLUSTRATIONS

CHAPTER 3 - PATIENT MOVEMENT

Figure 3-1 Global Patient Movement Requirements Center Functions
Figure 3-2 Theater Patient Movement Requirements Center Functions
Figure 3-3 Medical Regulating Control Center Functions
APPENDIX A – PATIENT EVACUATION
Figure A-1 Sample DD Form 600
Figure A-2 Sample DD Form 601
Figure A-3 Sample DD Form 602
Figure A-4 Evacuation Precedence
Figure A-5 Classification Codes
APPENDIX D – COMMUNICATIONS ASSISTANCE
Figure D-1 Phonetic Alphabet
Figure D-2 Numerals
Figure D-3 PROWORDS
APPENDIX E – MEDICAL REGULATING TEMPLATES AND REPORTS
Figure E-1 Example of an HSS Facility Spot Status Board
Figure E-2 Example of a Blood Status Board
Figure E-3 Example of a Joining Report Board
Figure E-4 Example of a Medical Regulating Status Board
Figure E-5 Voice Template: Facilities Spot Status Report
Figure F-6 Voice Template: Casualty Evacuation Request
Figure E-7 Voice Template: Blood Status Report/Request
Figure E-8 Facilities Spot Status Report
Figure E-9 Helicopter/Ambulance/Boat Evacuation Request

Figure E-10	Blood Status Report/Request
_	Medical Census Report
_	Consolidated Aeromedical Evacuation Request
_	Medical Joining Report
1 iguic L 13	Wiedeal Johning Report

LIST OF ABBREVIATIONS/ACRONYMS

ACC Air Combat Command (Air Force)

ADVON advanced echelon

AE aeromedical evacuation

AECC aeromedical evacuation coordination center

AELT aeromedical evacuation liaison team

AEOT aeromedical evacuation operations team

AH auxiliary hospital (Navy)(MSC per SECNAVINST 5030.IL)

ALCC airlift control center

AMC Air Mobility Command (Air Force)

AME airlift mobility element

AO area of operations

AOA amphibious objective area

AOC air operations center (Air Force)

AOR area of responsibility

ARC air reserve components

ASF aeromedical staging facility

ATF amphibious task force

AUTODIN Automatic Digital Network

BAS battalion aid station

BES beach evacuation station

BMU beachmaster unit

C2 command and control

CATF commander, amphibious task force
CBR chemical, biological, radiological

CBTZ combat zone

CIC combat information center

CJTF commander, joint task force

CLF commander, landing force

COMMZ communications zone

COMSEC communications security

CONUS continental United States

CRAF civil reserve air fleet

CRTS casualty receiving and treatment ship

DASC direct air support center

DMRIS Defense Medical Regulating Information System

DMSB defense medical standardization board

DNBI disease and nonbattle injury

DOD Department of Defense

DOW died of wounds received in action

DTG date-time group

EPW enemy prisoner of war
EUCOM European Command

FLOT forward line of own troops

FMF Fleet Marine Force

FSSG force service support group

FST fleet surgical team

GMT Greenwich Mean Time

GPMRC Global Patient Movement Requirements Center (formerly Armed Services

Medical Regulating Office (ASMRO))

GSA General Services Administration

HDC helicopter direction center

HF high frequency HQ headquarters

HSS health service support

ICD international classification of diseases

ITV in-transit visibility

IV intravenous

JCS Joint Chiefs of Staff

JFACC joint force air component commander

JFC joint force commander

KIA killed in action
LF landing force

LFSP landing force support party

LHA amphibious assault ship (multi-purpose)
LHD amphibious assault ship (general purpose)

LOC lines of communications

LZ landing zone

MAGTF Marine air-ground task force

MASF mobile aeromedical staging facility

MCA movement control agency

MEDEVAC medical evacuation
MEDREG medical regulating

MEF Marine expeditionary force

MIS management information system

MMART mobile medical augmentation readiness team

MOOTW military operations other than war

MOPP mission-oriented protective posture

MRCC medical regulating control center (Navy)

MRCO medical regulating control officer (Navy)

MRN medical regulating net

MRO medical regulating office(r) (Army; Air Force)

MTF military treatment facility

NBC nuclear, biological, and chemical

NEF naval expeditionary force NWP naval warfare publication

OCONUS outside the continental United States

OPCON operational control
OPLAN operation plan
OPORD operation order
PACOM Pacific Command
PCS primary control ship

PEC patient evacuation clerk (Marine Corps)
PEO patient evacuation officer (Marine Corps)

PMI patient movement items

RTD return to duty

SCS secondary control ship
SOF special operations forces

SOP standing operating procedure

STP Shock Trauma Platoon

TACC tactical air control center (Navy)

Tanker Airlift Control Center (Air Force)

TAES Theater Aeromedical Evacuation System

TAMMIS Theater Army Medical Management and Information System

TF task force

TPMRC Theater Patient Movement Requirements Center

TRAC2ES USTRANSCOM's Regulating and Command and Control Evacuation

System

TTP tactics, techniques, and procedures

TYCOM type commander

USA United States Army

USAF United States Air Force

USMC United States Marine Corps

USN United States Navy

USTRANSCOM United States Transportation Command

WIA wounded in action

GLOSSARY

active bed. Constructed beds currently set up and ready in all respects for the care of patients to include supporting space, equipment, and staff to operate under peacetime circumstances.

aeromedical evacuation. The movement of patients under medical supervision to and between medical treatment facilities by air transportation. (Joint Pub 1-02)

aeromedical evacuation coordination team (AECT). The source of AE operational expertise within the AMOCC. The AECT coordinates AE operational mission planning, tasking, and scheduling of airlift and AE assets to support patient movement in coordination with the J/TPMRC.

aeromedical evacuation liaison teams (AELT). An Air Force unit that provides a communications link and immediate coordination between the Service (e.g., MTF or MRCO) and their respective J/TPMRC.

aeromedical evacuation system. A system which provides:

- a. control of patient movement by air transport;
- b. specialized medical attendants and equipment for in-flight medical care;
- c. facilities on or in the vicinity of air strips and air bases, for the limited medical care of in transit patients entering, en route via, or leaving the system; and
- d. communication with originating, destination, and en route medical facilities concerning patient transportation. (Joint Pub 1-02)

air mobility operations control center (AMOCC). The theater's single C2 agency for intratheater air mobility operations external to a JTF. It provides centralized planning, tasking, scheduling, coordination, and C2 for assigned and attached intratheater air mobility forces operating in the geographic CINC's AOR.

amphibious operating area (AOA). A geographical area delineated in the initiating directive, for purposes of command and control within which is located the objective(s) to be secured by the amphibious task force. This area must be of sufficient size to ensure accomplishment of the amphibious task force's mission and must provide sufficient area for conducting necessary sea, air, and land operations. (Joint Pub 1-02)

amphibious task force (ATF). The task organization formed for the purpose of conducting an amphibious operation. The amphibious task force always includes Navy forces and a landing force, with their organic aviation, and may include Military Sealift- provided ships and Air Force forces when appropriate. Also called ATF. (Joint Pub 1-02)

battle casualty. Any casualty with an injury incurred as the direct result of hostile action, sustained in combat, or sustained while going to or returning from a combat mission provided that the occurrence was directly related to hostile action. Included are persons killed or wounded mistakenly or accidentally by friendly fire directed at hostile force or what is thought to be hostile force.

casualty. Any person who is lost to the organization by having been declared dead, duty status whereabouts unknown, missing, ill, or injured. (Joint Pub 1-02)

casualty overload. An overflow of casualties to one or more health service support facilities simultaneously in which the number of casualties exceeds the facilities capability.

casualty receiving and treatment ship (CRTS). In amphibious operations, a ship designated to receive, provide treatment for, and transfer casualties. (Joint Pub 1-02)

CATF Surgeon. The CATF Surgeon is the senior medical department officer on the amphibious task force staff and represents the commander in all matters pertaining to health service support for an amphibious operation.

CLF Surgeon. The CLF Surgeon is the senior medical officer on the landing force staff and represents the commander in matters pertaining to the health service support required for a landing force.

civil reserve air fleet (CRAF). A program in which the Department of Defense uses aircraft owned by a US entity or citizen. The aircraft are allocated by the Department of Transportation to augment the military airlift capability of the Department of Defense. These aircraft are allocated, in accordance with DOD requirements, to segments, according to their capabilities, such as International Long Range and Short Range Cargo and Passenger sections, National (Domestic and Alaskan sections) and Aeromedical Evacuation and other segments as may be mutually agreed upon by the Department of Defense and the Department of Transportation.

combat area. A restricted area (air, land, or sea) which is established to prevent or minimize mutual interference between friendly forces engaged in combat operations. (Joint Pub 1-02)

combat zone (CBTZ). That area required by combat forces for the conduct of operations. (Joint Pub 1-02)

communication zone (COMMZ). Rear part of theater of operations (behind but contiguous to the combat zone) which contains the lines of communications, establishments for supply and evacuation, and other agencies required for the immediate support and maintenance of field forces. (Joint Pub 1-02)

died of wounds received in action. A casualty category applicable to a hostile casualty, other than the victim of a terrorist activity, who dies of wounds or other injuries received in action after having reached a medical treatment facility. Also called DWRIA. (Joint Pub 1-02)

direct air support center (DASC). The principal air control agency of the US Marine air command and control system responsible for the direction and control of air operations directly supporting the ground combat element. It processes and coordinates requests for immediate air support and coordinates air missions requiring integration with ground forces and other supporting arms. It normally collocates with the senior fire support coordination center within the ground combat element and is subordinate to the tactical air command center. Also called DASC. (Joint Pub 1-02)

disease and nonbattle injury casualty (DNBI). A person who is not a battle casualty but who is lost to the organization by reason of disease or injury, including persons dying of disease or injury, by reason of being missing where the absence does not appear to be voluntary, or due to enemy action or being interned. (Joint Pub 1-02)

evacuation. The process of moving any person who is wounded, injured or ill to and/or between medical treatment facilities. (Joint Pub 1-02)

evacuation policy. Command decision indicating the length in days of the maximum period of noneffectiveness that patients may be held within the command for treatment. Patients who, in the opinion of responsible medical officers, cannot be returned to duty status within the period prescribed are evacuated by the first available means, provided the travel involved will not aggravate their disabilities.

2. A command decision concerning the movement of civilians from the proximity of military operations for security and safety reasons and involving the need to arrange for movement, reception, care, and

control of such individuals. 3. Command policy concerning the evacuation of unserviceable or abandoned materiel and including designation of channels and destinations for evacuated materiel, the establishment of controls and procedures, and the dissemination of condition standards and disposition instructions. (Joint Pub 1-02)

evacuation station. A medical battalion unit that deploys with surface or air elements of the Landing Support Battalion (landing force support party/helicopter support team). The evacuation station is responsible for the collection, triage, emergency treatment, and evacuation of combat casualties.

expanded bed. Active Beds plus Inactive Beds (does not include external beds).

external bed. Includes inpatient beds that have been acquired via external partnerships and VA sharing agreements.

forward edge of the battle area (FEBA). The foremost limits of a series of areas in which ground combat units are deployed, excluding the areas in which the covering or screening forces are operating, designated to coordinate fire support, the positioning of forces, or the maneuver of units. Also called FEBA. (Joint Pub 1-02)

forward line of own troops (FLOT). A line that indicates the most forward positions of friendly forces in any kind of military operation at a specific time. The forward line of own troops normally identifies the forward location of covering and screening forces. (Joint Pub 1-02)

global patient movement requirements center (GPMRC). A joint activity reporting directly to the Commander in Chief, US Transportation Command, the Department of Defense single manager for the regulation of movement of uniformed services patients. The Global Patient Movement Requirements Center authorizes transfers to medical treatment facilities of the Military Departments or the Department of Veterans Affairs and coordinates intertheater and inside continental United States patient movement requirements with the appropriate transportation component commands of US Transportation Command. See also medical treatment facility. (Joint Pub 1-02)

helicopter control section (HCS). Provides flight supervision and coordination for all helicopters in the amphibious area of operations and monitors flight control by helicopter direction center (HDC) when air control is vested afloat with the commander, amphibious task force. The HCS supervises and coordinates when more than one HDC is operating.

helicopter direction center. In amphibious operations, the primary direct control agency for the helicopter group/unit commander operating under the overall control of the tactical air control center. (Joint Pub 1-02)

inactive bed. (replaces SETUP BED) Constructed beds ready for the care of patients to include supporting space and equipment, but for which staffing is not available under peacetime circumstances. Beds need not necessarily be set up. Includes constructed bed space occupied by a function which could be relocated on a permanent basis and continue to operate assigned function. Does not include former constructed bed spaces that have been permanently altered for other use.

joint patient movement requirements center (JPMRC). A joint force health service support center under the control of the subordinate joint force surgeon, established to coordinate and control, in terms of identifying bed space requirements, the movement of patients within and out of the joint operations area. The joint patient movement requirements center also generates subordinate joint force commander (JFC) plans and schedules to evacuate the subordinate JFC's patients to medical treatment facilities in accordance with the supported combatant commander's Theater Patient Movement Requirements Center theater plans and schedules for movement of the patient to the Medical Treatment Facility. Also called JPMRC.

killed in action (KIA). A casualty category applicable to a hostile casualty, other than the victim of a terrorist activity, who is killed outright or who dies as a result of wounds or other injuries before reaching a medical treatment facility. Also called KIA. (Joint Pub 1-02)

landing force (LF). A task organization of troop units, aviation and ground, assigned to an amphibious assault. It is the highest troop echelon in the amphibious operation. (Joint Pub 1-02)

landing zone (LZ). Any specified zone used for the landing of aircraft. (Joint Pub 1-02)

lift of opportunity. A non-scheduled means of patient transportation.

mass Casualty (MASCAL). Any large number of casualties produced in a relatively short period of time, usually as the result of a single incident such as a military aircraft accident, hurricane, flood, earthquake, or armed attack that exceeds local logistical support capabilities. (Joint Pub 1-02)

medical boat. A designated amphibious task force landing craft tasked to transport casualties from the beach to the CRTS. Medical boats operate from each battalion-landing beach. A medical boat flies the "M" flag. Personnel include the boat crew, health service support personnel, and communication personnel. The boat equipment includes first aid supplies, litters (no fewer than 20), voice and visual communications equipment, and spare tarpaulins.

medical regulating. The actions and coordination necessary to arrange for the movement of patients through the echelons of care. This process matches patients with a medical treatment facility, which has the necessary health service support capabilities, and it also ensures that bed space is available. (Joint Pub 1-02)

medical regulating control center (MRCC). The MRCC is the amphibious task force coordination center for the movement of patients within the amphibious objective area and area of operations. The MRCC location is normally with HDC, DASC, or the primary control ship (PCS). It is directed and supervised by the medical regulating control officer (MRCO) and maintains liaison with the J/TPMRC. When control of medical regulating passes ashore the LF patient evacuation function is normally established with the DASC or the CSSE and is directed and supervised by the LF patient evacuation officer (PEO).

medical regulating control officer (MRCO). The medical regulating control officer (MRCO) is usually a medical administrative officer or senior enlisted person from the health service support staff of the amphibious task force who directs and supervises the operation of the medical regulating team, is net control for the medical regulating net, and maintains liaison with the J/TPMRC. The MRCO also keeps the amphibious task force and LF Surgeons and the J/TPMRC informed on the current status and operations of patient movement within the task force.

medical regulating net. The formal radio communication net for the medical regulating system. The success of the medical regulating system depends upon reliable communications over dedicated and parallel systems. Both the CATF MRCO and the CLF PEO must have the same dedicated radio communications net. This is coordinated by the ATF communications officer and the LF communications-electronics officer ensuring that communication requirements for the medical regulating system are addressed in all OPORDs/OPLANs. The primary purpose of the medical regulating net is to provide a means of rapid communications between the MRCOs, medical regulating teams, and the J/TPMRC. This ensures a constant flow of current capability information between MTFs and control agencies.

medical regulating team. A team of medical regulators and Navy or Marine Corps radio operators assigned to mobile or fixed medical treatment facilities, under the direct supervision of a medical regulating officer. The team receives and maintains information regarding the health service support capabilities of the medical treatment facilities within the amphibious area of operations and coordinates the regulation of casualties under their cognizance. Within the LF, this team is called the patient evacuation team.

medical treatment facility (MTF). A military facility established for the purpose of furnishing medical and/or dental care to eligible individuals.

mobile aeromedical staging facility (MASF). An Air Force medical facility tasked with temporarily holding patients awaiting evacuation out of the amphibious task force or landing force's area of operations. This facility provides only sustaining treatment of evacuees, but does not initiate new treatment regimens. Patients return usually to their transferring MTF, if flights are canceled or delayed.

mobile medical augmentation readiness team (MMART). The mobile medical augmentation readiness team serves as a peacetime force of trained health service support personnel capable of rapidly augmenting operational forces for limited military operations (less than 180 days), disaster relief missions, fleet and Marine Force exercises, and scheduled deployments. As a secondary mission, MMART assets may also augment shore-based medical treatment facilities (MTFs).

NBC defense. Nuclear defense, biological defense, and chemical defense, collectively. (Joint Pub 1-02)

operating room.

- a. Major. A fully equipped and staffed operating room capable of supporting specialized or extensive surgical care. (Main Operating Rooms)
- b. Minor. A treatment room/area that does not have the equipment and staff to support surgical cases but is usable for treatment of shock, minor injuries, pre-surgical procedures, etc. (Battle Dressing Stations/Sick call Treatment Rooms)

operation order (OPORD). A directive issued by a commander to subordinate commanders for the purpose of effecting the coordinated execution of an operation. Also called OPORD. (Joint Pub 1-02)

operation plan (OPLAN). A plan for a single or series of connected operations to be carried out simultaneously or in succession. It is usually based upon stated assumptions and is the form of directive employed by higher authority to permit subordinate commanders to prepare supporting plans and orders. The designation "plan" is usually used instead of "order" in preparing for operations well in advance. An operation plan may be put into effect at a prescribed time, or on signal, and then becomes the operation order.

overflow beds. Beds that may be used for patients (troop/staff berthing). These beds are normally staffed by HSS augmentation personnel and used for patient holding and evacuation only if embarked troops are gone.

patient. A sick, injured, wounded or other person requiring medical/dental care or treatment. (Joint Pub 1-02)

patient movement. The transfer of patients from one level of medical capability to another level by ground, sea or air for more definitive treatment. Functions include medical regulating, patient evacuation and providing en route care.

primary control ship (PCS). In amphibious operations, a ship of the task force designated to provide support for the primary control officer and a combat information center control team for a colored beach. (Joint Pub 1-02)

queue. A waiting line of persons or vehicles.

stabilized patient. A patient whose airway is secured, hemorrhage is controlled, shock treated, and fractures are immobilized. (Approved for inclusion in the next edition of Joint Pub 1-02.)

stable patient. A patient for whom no in-flight medical intervention is expected but the potential for medical intervention exists. (Approved for inclusion in the next edition of Joint Pub 1-02.)

tactical air control center (TACC). The principal air operations installation (land or ship based) from which all aircraft and air warning functions of tactical air operations are controlled. Also called Navy TACC. (Joint Pub 1-02)

theater. The geographical area outside the continental United States for which a commander of a combatant command has been assigned responsibility. (Joint Pub 1-02)

theater patient movement requirements center (TPMRC). The TPMRC is responsible for theater wide patient movement (e.g., medical regulating and AE scheduling), and coordinates with theater MTFs to allocate the proper treatment assets required to support its role. The primary role of the TPMRC is to devise theater plans and schedules and then monitor their execution in concert with the GPMRC. The TPMRC is responsible to the Combatant Commander through the Combatant Command Surgeon. The TPMRC is also responsible for all aspect of intratheater patient movement management. A TPMRC provides command and control for patient movement management operations in its theater of operations, as directed by its Combatant Commander's operational policy, and in coordination with USTRANSCOM, acting as a supporting combatant command, responsible for intertheater and CONUS patient movement.

triage. The evaluation and classification of casualties for purposes of treatment and evacuation. It consists of the immediate sorting of patients according to type and seriousness of injury, and likelihood of survival, and the establishment for priority for treatment and evacuation to assure medical care of the greatest benefit to the largest number. (Joint Pub 1-02)

wounded in action (WIA). A casualty category applicable to a hostile casualty, other than the victim of a terrorist activity, who has incurred an injury due to an external agent or cause. The term encompasses all kinds of wounds and other injuries incurred in action, whether there is a piercing of the body, as in a penetration or perforated wound, or none, as in the contused wound. These include fractures, burns, blast concussions, all effects of biological and chemical warfare agents, and the effects of an exposure to ionizing radiation or any other destructive weapon or agent. The hostile casualty's status may be very seriously ill or injured, seriously ill or injured, incapacitating illness or injury, or not seriously injured. Also called WIA. (Joint Pub 1-02)

PREFACE

PURPOSE

The purpose of NTTP 4-02.2, Patient Movement, is to provide a general summary of the health service support (HSS), and specific tactics, techniques, and procedures (TTP) for Naval Expeditionary Force (NEF) Medical Regulating and evacuation. When properly applied, the patient movement process ensures that patients move to the level of care that their health needs dictate which, in turn, assures the efficient and effective use of the limited HSS assets available to the Task Force (TF).

SCOPE

The scope of this publication includes the doctrine and selected TTP for the patient movement process.

TARGET AUDIENCE

The intended audience for this publication includes operational (supported) commanders, supporting commanders, planners, logisticians, and HSS personnel.

Throughout this publication, references to other publications imply the effective edition.

Report any page shortages by letter to Director, Navy Tactical Support Activity (copy to Naval Tactical Publications).

ORDERING DATA

Order a new publication or change, as appropriate, through the Navy Supply System. Changes to the distribution and allowance lists (to add or delete your command from the distribution list or to modify the number of copies of a publication that you receive) must be made in accordance with NWP 1-01.

RECOMMENDED CHANGES

Recommended changes to this publication may be submitted at any time using the accompanying format for routine changes.

All Atlantic and Pacific fleet units and stations and all other units and CONUS shore activities submit recommendations to:

NAVAL TACTICAL PUBLICATIONS NAVAL WAR COLLEGE 686 CUSHING ROAD NEWPORT, RI 02841 Also, forward two copies of all recommendations to:
NAVAL TACTICAL PUBLICATIONS
NAVAL WAR COLLEGE
686 CUSHING ROAD
NEWPORT, RI 02841

URGENT CHANGE RECOMMENDATIONS

When items for changes are considered to be urgent (as defined in NWP 1-01, and including matters of safety), this information shall be sent by message (see accompanying sample message format) to Naval Tactical Publications, with information copies to all other commands concerned, clearly explaining the proposed change. Information addressees should comment as appropriate. See NWP 1-01.

CHANGE SYMBOLS

A black vertical line in either margin of the page indicates revised text in changes, like the one printed next to this paragraph. The change symbol shows where there has been a change. The change might be material added or information restated. A change symbol in the margin by the chapter number and title indicates a new or completely revised chapter.

CHAPTER 1

Introduction

1.1 HEALTH SERVICE SUPPORT GOAL

The primary goal of an HSS system is to assist in conserving the fighting strength of the Task Force (TF) and to minimize the effects of wounds, injuries, and disease. This goal is accomplished by providing the *RIGHT* service, in the *RIGHT* place, at the *RIGHT* time. This triad of right service, right place, and right time is the foundation of the HSS system.

1.2 HEALTH SERVICE SUPPORT PROCESS

The HSS system consists primarily of two interdependent processes: the identification of health risks and prevention of illness and injury, and the rapid intervention and treatment of illness and injury. Concurrently, the HSS system allows the commander to rapidly identify replacement personnel for those unable, as a result of illness and/or injury, to Return To Duty (RTD) in a pre-established timeframe. This timeframe is known as the Theater Evacuation Policy. (The Theater Evacuation Policy is discussed in Chapter 2 of this publication.)

This manual deals with the second element of this process--the rapid intervention and treatment of illness and injury. In application, this element provides a continuum of healthcare through a series of successive levels. Each successive level provides a gradually increasing series of clinical capabilities. Through this linear model, patients are resuscitated and stabilized on the battlefield and then evacuated to an HSS facility capable of meeting their clinical needs. Those patients who will not RTD within the established Theater Evacuation Policy are evacuated as early as clinically feasible to a Military Treatment Facility (MTF) in another theater or to a Continental United States (CONUS) MTF.

NOTE: Although the TTP in this NTTP appears to concentrate on operations involving the Navy and Marine Corps, they are applicable to all operations involving NEF including other Services and allies.

CHAPTER 2

Patient Movement Planning

2.1 CURRENT HSS DOCTRINE

HSS is an important element in the logistic support required to sustain the warfighting effort. The basic principles associated with logistics are also applicable to HSS. These principles are *responsiveness*, *simplicity*, *flexibility*, *economy*, *attainability*, *sustainability*, *and survivability*. In addition, *continuity* is a principle that is unique to HSS.

Like the principles of war, the principles of logistics are guides for planning, organizing, managing, and execution. Seldom will the application of these principles be equally distributed. One or more of them can dominate in a given situation and the correct identification of the dominant principle(s) is essential to establishing an effective HSS system.

2.2 LEVELS OF CARE

HSS within an Area of Operations (AO) is organized in levels of care within the continuum that extend rearward throughout the theater, to contiguous theaters, all the way to CONUS. Levels of Care as a term has replaced the term Echelons of Care in accordance with the Joint Health Service Support Strategy of Vision 2010. Each level is designed to provide the mobility and capability required to meet the basic healthcare needs of the supported units, yet provide progressive and phased treatment, hospitalization, and evacuation of the sick and injured. There are five levels of care beginning with initial point of wounding: First Response; Forward Resuscitative Surgery; Theater Hospitalization; En route Care; and CONUS-based Definitive Care. Specific definitions and capabilities of each level are contained in NWP 4-02, "Naval Force Health Protection."

2.3 FUNDAMENTALS OF HEALTH SERVICE SUPPORT PLANNING

Comprehensive planning is essential to the success of any operation. The parameters for HSS planning are formed by the assigned mission, the commander's analysis and interpretation of the mission, and the planning guidance issued by the commander to the Health Service Support staff.

HSS planning is accomplished in conjunction with overall operations planning and logistic support planning. Development of an efficient plan requires combined and coordinated efforts of all involved. Most operations are complex and require plans that are complete, functional, and flexible to the maximum degree possible within available resources. General principles of HSS planning are contained in Chapter 3 of NWP 4-02 Naval Force Health Protection.

2.4 THEATER EVACUATION POLICY

Early in an operation's decision process, certain command decisions must be made. One such decision is the Theater Evacuation Policy. This policy is initially established by the Secretary of Defense with advice from the Joint Chiefs of Staff and upon the recommendation of the commander-in-chief of the applicable unified command.

- 1. The policy establishes the maximum number of non-effective days (hospitalization and convalescence) that casualties may be held within the theater for treatment. Patients, who, in the opinion of responsible medical officers, cannot be RTD within the period prescribed, are evacuated as soon as clinically and tactically possible. Stated theater evacuation policy is cumulative for OPZONE 1 and OPZONE 2. Evacuation policy for OPZONE 3 (CONUS) applies to patients received at DOD medical facilities.
- 2. This policy does not mean a patient will be held in theater for the entire period during recovery. A stabilized patient who is clearly not going to be able to RTD within the Theater Evacuation Policy will be evacuated to a supporting theater or CONUS for continued treatment, providing that evacuation will not exacerbate the patient's condition.
- 3. Since the Theater Evacuation Policy directly impacts the warfighting force during combat operations, the Task Force Surgeon must consider certain issues when recommending a Theater Evacuation Policy to the Task Force Commander.
- a. The dynamic nature of combat operations requires that the Theater Evacuation Policy be fluid. It is possible that this policy could change on a day-to-day, hour-to-hour basis in front line combat forces. Subordinate commands in theater may request establishment of a shorter Theater Evacuation Policy for specific units or during specific timeframes.
- b. It must not hamper the ability of HSS facilities to displace and relocate. HSS units in forward areas must remain as flexible as the combat units they support.
- c. It must consider the line commander's need to retain as many seasoned personnel in the AO as possible. This requirement must be balanced with the knowledge that the longer (the number of days) the Theater Evacuation Policy, the larger the theater HSS system must be to accommodate this policy.
- 4. The Theater Evacuation Policy has different meanings to the various HSS members:
- a. To the healthcare provider it means there is a maximum period within which the clinical staff may complete the treatment necessary to return the patient to full duty in the theater. For example, if the policy is 60 days, the patient must RTD within that 60-day period. If the patient cannot RTD, the patient will be evacuated to another theater or CONUS as early as clinically practical.

- b. To the HSS planner, it provides a major guideline to follow when developing the overall intratheater HSS. The longer the policy, the more HSS resources will be required in the theater. Conversely, the shorter the policy, the more evacuation assets will be required to support the operation.
- c. To the logistics staff (both HSS and non-HSS), it provides a planning factor that will assist in determining the HSS materiel required to support the operation.
- d. Finally, the HSS operational personnel will use it as a management tool which, when properly adjusted and applied, will provide the balance between patient care and the tactical situation. When the health care provider applies the evacuation policy, common sense must prevail.
- **2.4.1 Determining Theater Evacuation Policy.** The following factors are used in determining the Theater Evacuation Policy:
- 1. Nature of Tactical Operations. Will operations be of short duration and small magnitude or long duration and heavy magnitude? Will CBR weapons be employed or only conventional weapons used? Is a static or dynamic combat situation expected?
- 2. Number and Types of Patients. The anticipated numbers and types of patients will be a determining factor, both over a time line and during major phases of the operation. Additionally, the projected RTD rate will be considered. Admission rates vary widely in different geographical areas of the world and in different types of military operations.
- 3. The Means of Evacuation. Consideration must be given to the means (volumes and types of assets) available for evacuation of patients within and out of the AO.
- 4. Availability of Replacements. The capability of CONUS to provide replacement personnel to the theater must also be considered. The farther back the casualty is evacuated, the less likely it is they will return to the combat zone.
- 5. Availability of Theater Resources. Availability and/or limitations of all HSS resources in and contiguous to the AO.
- 6. Timeliness. The amount of time allowed by the situation to respond, mobilize, and build-up.
- **2.4.2 Command, Control, Communication, and Computer (C4) System.** A C4 system is required to perform patient movement functions. The Joint Force Commander (JFC) is responsible for establishing the system to integrate capabilities of the patient movement system. The intent is to support the operational requirements of HSS information management. Service component commanders are responsible for command and control of the individual HSS organizations. The joint force surgeon is

responsible for the joint patient movement concept of operations and for identifying communications requirements in order to integrate the functional aspects of the joint patient movement, medical regulating, and evacuation protocols of transport from theater. A viable contingency plan can ensure success of patient movement operations in the event the communication system becomes inoperable. HSS planners are responsible for identifying the capabilities between Service component forces assigned to a patient movement mission. If there is no commonality, the JFC will develop a theater plan. Service HSS units will provide short-range radio communications. If possible, theater-based, long-range communications will be used.

2.4.3 Patient Movement Items (PMIs). PMIs are medical equipment and supplies required to support the patient. A logistical infrastructure must be reliable to support a PMI exchange system. The exchange system and the return of PMI equipment should be addressed in the respective theater Operation Plan (OPLAN). The originating MTF will provide PMI required to support the patient during the evacuation. This PMI will remain with the patient until arrival at the destination MTF, regardless of the location of the MTF. The Services will provide the necessary quantities of Joint Readiness Clinical Advisory Board (JRCAB) standardized PMI.

CHAPTER 3

Patient Movement

3.1 GENERAL

The patient movement system consists of three components: medical regulating, patient evacuation and en route care. The goal of the patient movement system is to move patients from the point of injury or illness as rapidly as possible, into and subsequently through the established HSS system. The guiding principle in patient movement is that patients will be moved only as far rearward as the tactical situation dictates or as clinical needs change. Prompt movement of patients to the required level of clinical care is essential to avoid increased morbidity and mortality.

3.2 BASIC CONSIDERATIONS

Providing healthcare for the sick and injured during combat will be greatly influenced by the tactical situation. Success in achieving the combat mission must remain the primary goal of all assigned units. Patient care involves dynamic decision making processes that require constancy throughout the theater HSS system. Certain practices must be applied and reapplied at all levels of the HSS system.

- **3.2.1 Triage/Sorting.** Casualties must be continuously evaluated to differentiate between those in need of immediate treatment and those whose treatment can be delayed. Equally important is the need to determine which patients require evacuation to other HSS facilities. Incoming patients create a continuing need to evacuate those occupying beds. The constant flow of sick and injured personnel into HSS facilities can rapidly overwhelm facility capabilities unless there is a system in place for triage and patient movement. This process of patient care and patient movement requires close coordination between clinical and administrative personnel.
- **3.2.2 Triage Category Codes.** Incoming patients are classified by level and immediacy of required treatment. The United States and other allies have adopted five triage category groups for use.
- **3.2.2.1 Immediate Treatment (Group T1).** This includes those patients requiring emergency life saving resuscitation/surgery. The procedures should not be time-consuming and should concern only those patients with a high chance of survival. Some examples are:
- 1. Respiratory obstruction
- 2. Accessible hemorrhage
- 3. Emergency amputation

A Triage category can change with little to no intervention; i.e. putting in an airway could change a patient from a T1 to T2 category and involve only minimal intervention. Another example is placing a tourniquet on a major arterial bleed.

- **3.2.2.2 Delayed Treatment (Group T2).** This group includes patients badly in need of time-consuming major surgery, but whose general condition permits delay in treatment without unduly endangering their lives. Frequently, to decrease the potentially critical effects of delaying surgery for these patients, sustaining treatment such as stabilizing IV fluids, splinting, administration of antibiotics, relief of pain, etc. will be required. Examples of this group are:
- 1. Large muscle wounds
- 2. Fractures of major bones
- 3. Intra abdominal and/or thoracic, head, and spinal injuries
- 4. Uncomplicated major burns.
- **3.2.2.3 Minimal Treatment (Group T3).** This group includes patients with relatively minor injuries who can frequently care for themselves or who can be helped by lesser-trained HSS personnel. Examples of injuries included are:
- 1. Minor lacerations
- 2. Sprains and strains
- 3. Abrasions
- 4. Minor burns.
- **3.2.2.4 Expectant Treatment (Group T4).** This group is comprised of patients who have received serious and often multiple injuries, and whose treatment would be time-consuming and complicated with a low chance of survival. Until other categories of patients are treated, this group will receive appropriate supportive treatment. These patients should not be abandoned and every effort should be devoted to their comfort. Despite their often massive and alarming injuries, the possibility of survival must always be kept in mind. Injuries included in this group would be:
- 1. Severe multiple wounds
- 2. Severe head or spinal wounds
- 3. Widespread, severe burns
- 4. Large doses of radiation.
- **3.2.2.5 Deceased (T5).** This group is comprised of the Killed In Action (KIA) and Died of Wounds Received in Action (DOW). They are the last category of patients and will be handled by Graves Registration, if established. However, in the absence of established graves registration, TF supply

personnel will be responsible for the Mortuary Affairs Program. Master at Arms and Chaplains will assist in the initial phase of handling this category of patients.

It is essential to recognize that triage is a dynamic process. Many factors affect the decision to assign a specific triage category to a patient. Any significant change in those factors can call for reassessment of the patient's condition, clinical needs, and triage category. The overall situation must be continuously and carefully monitored. The effectiveness of patient evacuation and medical regulating relies heavily on the continued practice of effective patient triage.

3.3 PATIENT EVACUATION

Patient evacuation is the timely and efficient transportation of wounded, injured, or ill personnel from the immediate area of operations to HSS facilities and, as required, between HSS facilities. Evacuation begins at the location where the injury or illness takes place and continues as far rearward as the patient's medical condition warrants and/or the military situation dictates. In the lower levels in the continuum of care, patients are moved to the nearest HSS facility whereas in the higher levels, they are regulated to a designated facility.

- **3.3.1 Basic Tenets for Patient Movement.** Because patient evacuation is closely tied to medical regulating, it is important to understand their interdependent relationship.
- 1. No patients are evacuated farther rearward than their medical condition requires or the tactical situation dictates.
- 2. Supporting HSS units are responsible for evacuation of patients from HSS units forward of the supporting unit's position.
- 3. Service component commanders are responsible for evacuation of patients to hospitals in their Area Of Responsibility (AOR).
- 4. The Unified Command is responsible for the movement of patients between hospitals in their AOR.
- 5. The Unified Command is responsible for issuing procedures for evacuation of formerly captured or detained U.S. personnel.
- 6. The Unified Commander will issue procedures for evacuation of Enemy Prisoner(s) of War (EPW), civilian internees, detainees, and civilian patients. Sick and wounded EPW are treated and evacuated through normal medical channels, but remain physically segregated from U.S. and allied patients.
- **3.3.2 Planning for Patient Evacuation.** Planning patient evacuation involves considering all available forms of transportation and providing appropriate HSS personnel in the evacuation system to

assure continuity of patient care. It also involves planning the routing, controlling evacuation movements, and planning the location of evacuation facilities. Patient collection points, ambulance exchange points, and an ambulance shuttle system (ambulance loading points, ambulance relay points, and ambulance control points) must also be planned. Thorough investigation of all the available Lines of Communication (LOC) is an essential prerequisite to such planning.

- 1. The use of helicopters and tilt-wing aircraft in patient evacuation has greatly increased patients' chances for survival. The ability to get the patient to the required level of care more rapidly has significantly decreased the mortality rate. While this means of evacuation is rapid and efficient, certain hazards are inherent in the conduct of Aeromedical Evacuation (AE) missions. Such missions must be carefully planned and meticulously executed. The following priorities are used by the Army:
- a. Priority I-URGENT. Patients that require emergency, short notice evacuation within a maximum of 2 hours to save life, limb, or eyesight and to prevent serious complications of the injury, serious illness, or permanent disability.
- b. Priority IA URGENT-SURGICAL. Patients that require far forward surgical intervention to save life and stabilization for further evacuation.
- c. Priority II PRIORITY. Patients that require prompt medical care, within a maximum of 4 hours, to prevent the medical condition from deteriorating to an URGENT precedence, to prevent unnecessary pain or disability, or who require treatment not available locally.
- d. Priority III ROUTINE. Patients who do not require immediate medical attention and whose condition is not expected to deteriorate significantly. They should be evacuated within 24 hours.
- e. Priority IV CONVENIENCE. Patients for whom evacuation by medical vehicle is a matter of medical convenience rather than necessity.
- 2. Patients being aeromedically evacuated by USAF or Civil Reserve Air Fleet (CRAF) aircraft will also be assigned priorities for evacuation. In the event aircraft availability or space on available aircraft is limited, more urgent patients are evacuated before those whose conditions are less serious. Patient evacuation priorities, although collaterally related to triage categories and to those categories used by the Army, should not be confused with them. The following priorities are used by USAF and CRAF:
- a. Routine AE Patient. Per DODI 6000.11 series definition, a patient who requires movement but can wait for a regularly scheduled channel AE mission, a scheduled military airlift channel mission, or commercially procured airlift service.
- b. Priority AE Patient. Per DODI 6000.11 series definition, a patient who requires movement within 24 hours to save life, limb, or eyesight (typically sooner than the next scheduled channel AE mission or

sooner than can be accommodated using scheduled channel mission, or commercially-procured airlift service).

- c. Urgent AE Patient. Per DODI 6000.11 series definition, a patient who requires movement as soon as possible to save life, limb, or eyesight. Immediate action shall be taken to obtain AE or other suitable transportation to meet patient requirements. Terminally ill or psychiatric patients are not considered urgent patients.
- d. Priority 4. Patients for whom AE is a matter of medical convenience rather than necessity.
- 3. Every patient evacuated without sufficient reason imposes unnecessary burdens on:
- a. Their unit, which will be understaffed until the patient is returned or replaced;
- b. The replacement system that must procure, train, and transport a replacement; and
- c. The HSS system that must provide bed space and personnel to care for the patient.
- **3.3.3 Intratheater (Tactical) Evacuation.** Intratheater evacuation, sometimes referred to as tactical evacuation, is the movement of patients between HSS facilities in the Combat Zone (CBTZ) and the Communications Zone (COMMZ). Specifically, patients may be regulated between Level II and Level III by the MRCC, and among Level III HSS facilities by the J/TPMRC, as required. This process, as previously stated, requires thorough planning to ensure successful accomplishment.

Note

Patients are not regulated from Level I (Battalion Aid Stations (BASs), Beach Evacuation Stations (BESs) and Shock Trauma Platoons (STP's)) to Level II (Surgical Company and Casualty Receiving and Treatment Ships (CRTS)), they are evacuated. At this level in the HSS system, only flow-through beds exist. True hospital beds exist only at Level III and above. STPs and surgical companies holding beds are cots. Normally, these may hold patients for up to 72 hours only.

- 1. As the various medical regulating and patient evacuation elements coordinate the movement of patients to and between the various HSS facilities involved, thorough record keeping and reporting are absolutely essential.
- 2. During routine deployments, the Task Force Surgeon will coordinate evacuation of patients between the requesting unit and appropriate shore-based MTFs.

During combat operations, the TF Medical Regulating Control Officer (MRCO) will coordinate the evacuation and regulating of patients to MTFs. The J/TPMRC will coordinate the evacuation and regulating of patients between MTFs.

- a. Medical regulating during combat operations can be a time-consuming and demanding function. The MRCO will receive requests from any number of disparate units. Effective planning can prevent this by ensuring that all shore-based elements channel patients to a single, or at most, a small number of patient evacuation points. This will minimize the number of requests the MRCO must process.
- b. The other problem can come from AE by "lifts of opportunity." These are frequently emergency in nature, and almost always spontaneous. The MRCO may not learn about these "incoming emergency MEDEVACs" until they are almost at their destination. Patients arriving in this fashion are accepted without question, triaged, and provided treatment within the capabilities of the receiving unit. In many cases, these patients will require immediate evacuation to another HSS facility. Every effort must be made to include guidance in the OPLAN or Operation Order (OPORD) for aircrews and air control agencies to ensure the earliest possible notification of the MRCO in such cases. A few such lifts alone can overwhelm a small HSS facility, create a casualty overload situation, and temporarily place the medical regulating program in crisis.
- 3. There are three means of moving regulated patients during combat operations. Selection of the appropriate means will be determined by the tactical situation, availability of assets, the patient's condition, and the location of the receiving HSS facility.
- **3.3.3.1 Ground Evacuation.** The use of litter teams and vehicles to accomplish ground evacuation usually takes place early in the operation between front-line units, BASs, and medical battalion units. Ground evacuation in amphibious operations can consist of the casualties themselves (walking), litter teams, or any form of vehicle available. Specific vehicles and their capabilities are listed in Appendix B.

During the planning phase of an operation, it is important to clearly identify projected LOCs, position HSS facilities near them, and use available vehicles to move patients from the front line to HSS facilities.

3.3.3.2 Aeromedical Evacuation. AE is the preferred method for moving patients in a theater of operations. Accordingly, the major amphibious combatants that serve as aviation platforms have also been designed to serve as CRTSs. This allows the use of available aviation assets to ferry patients between the battlefield and supporting ships at sea during amphibious operations. Although the Navy and Marine Corps have no dedicated air ambulances, many airframes can be configured to transport patients.

Note

IAW CJCSI 3110.03 and Joint Pub 4-02, the US Army is doctrinally responsible for providing medical rotary-wing support for all ship to shore and shore to ship patient transport. This includes the hospital ship Auxiliary Hospital (AH) as well as the CRTSs. Plans should reflect this arrangement when it supports the commander's concept of operation; otherwise, the Navy and Marine Corps have doctrinal responsibility for ship to shore and shore to ship movement from amphibious ships.

- 1. The Air Operations Plan should address the use and designation of appropriate aircraft for patient evacuation. Consideration should be given to assigning AE duties to specific assets as the tactical situation permits. Such designation permits the placement of HSS personnel on these aircraft and permits the use of modular medical sets in the designated aircraft.
- 2. In large-scale operations (joint and coalition), the unified commander is responsible for establishing a Theater Aeromedical Evacuation System (TAES). The primary mission of the TAES is to transport patients by air under medical supervision from forward airfields in the CBTZ to points of definitive medical care within the CBTZ (intratheater), from the CBTZ to HSS facilities in the COMMZ (intra or intertheater, depending on the theater). The TAES usually evacuates patients from Level III to Level IV facilities and from Level IV to Level V MTFs, but can operate as far forward as a C-130 or other aircraft used for AE routinely operates in support of operations. The TAES is covered in Appendix A. Specific aircraft types and capabilities for patient transport are contained in Appendix B.
- **3.3.3.3 Sea (Waterborne) Evacuation.** This type of evacuation will be used to move patients from the shore to ship(s) at sea and between ships. During the planning phase, certain boats are designated as medical boats and are staffed and equipped accordingly. During the initial phase of amphibious operations, when aircraft are heavily involved in moving and supporting combat forces, patients may be evacuated from the beach on boats returning to their launch platforms (amphibious ships). Although slower than aircraft, boats are usually more readily available during the initial phase of an amphibious operation and can easily be rigged to handle patient evacuation. Patients returning to a CRTS via boat will usually be staged at a BES awaiting transportation. As with all means of evacuation, the use of boats returning to their "mother" ships for patient evacuation must be addressed thoroughly in the OPLAN/OPORD for the operation.
- **3.3.4 Intertheater (Strategic) Evacuation.** Intertheater evacuation, sometimes referred to as strategic evacuation, is the responsibility of USTRANSCOM. Like tactical AE, strategic AE may consist of dedicated and/or opportune aircraft that are equipped and medically staffed for patient evacuation. Conducting strategic AE is based on the following assumptions:
- 1. Intratheater AE will be accomplished primarily by using retrograde or possibly dedicated C-130 and C-9 aircraft.
- 2. Intertheater AE will be accomplished primarily by using retrograde or dedicated C-141, C-17 and/or other USAF common user aircraft. (If the Civil Reserve Air Fleet is activated, the B-767 AE Civil Reserve Air Fleet will be the primary means of strategic AE).

- 3. Prior to movement, patients will normally have a destination MTF or location identified by the JPMRC (or TPMRC).
- 4. Patients will enter the AE system stabilized within the capabilities of the sending HSS facility and with appropriate PMI to accompany them on the flight.

Service Component MROs report patient movement requirements for intratheater evacuation to the JPMRC (or TPMRC). The J/TPMRC will coordinate with either a TPMRC from another theater or the GPMRC for patients requiring CONUS care. Specific procedures for requesting intratheater evacuation will be contained in the TF OPLAN. Accordingly, Service component HSS planners must review the TF OPLAN to ensure a seamless interface from Service-level patient movement to intratheater and intertheater patient movement. Section A4 of Appendix A contains descriptions of units assigned to a TAES.

3.4 MEDICAL REGULATING

Joint Pub 1-02 DOD Dictionary of Military and Associated Terms defines medical regulating as the actions and coordination necessary to arrange for the movement of patients through the levels (formerly referred to as echelons) of care. This process matches patients with a medical treatment facility that has the necessary health service support capabilities, and it also ensures that bed space is available. This process is important for a number of reasons:

- 1. It ensures a patient is assigned to a facility capable of providing the required treatment.
- 2. It ensures the facility has the space required to provide the required service(s).
- 3. It ensures facilities do not receive patients they are unable to provide care for, either through lack of required clinical services or non-availability of a bed.

Medical regulating is most effectively accomplished when it functions at the same headquarters that controls the evacuation means.

3.4.1 Planning for Patient Movement. Patient movement is the dynamic combination of medical regulating, patient evacuation and en route care. An effective patient movement system must simultaneously consider the options for evacuation available (i.e., the "lift") and the medical regulating options available (i.e., the "bed"). Sometimes referred to as lift-bed planning, it is inherently more comprehensive than medical regulating alone. Medical planners must develop both the conceptual treatment structure (personnel, facilities, location, etc.) for the HSS system, as well as a medical regulating, patient evacuation infrastructure and provide en route care to the extent possible in order to create an effective patient movement system.

- 1. The foundation of a patient movement system is a comprehensive communications network that directly ties together all HSS treatment elements and indirectly connects with the TF's transportation elements.
- 2. The current CJCSM 3122.03 (JOPES Planning Formats and Guidance) has combined the previous Appendix 1 to Annex Q (Medical Regulating) and the previous Appendix 4 to Annex Q (Patient Evacuation) into a comprehensive Appendix 1 to Annex Q (Joint Patient Movement Systems). In developing Appendix 1 to Annex Q (HSS) of the OPLAN, HSS planners must ensure:
- a. The patient movement appendix is addressed in sufficient detail to guide the conduct of an effective program.
- b. All HSS facilities are clearly identified, CRTSs have been designated (if required by the operation) and an overall "loading" plan for available HSS facilities has been developed.
- c. The Communication Plan identifies a dedicated Medical Regulating Net (MRN) and ensures compatibility for all elements of the TF requiring medical regulating capability. It must also allocate frequencies and provide for secure communications, including encryption capability, when required by the tactical situation and ensure the ability to communicate with ground HSS units.
- d. The air plan contains provisions that satisfy medical regulating control elements' requirements for collocation with the appropriate air control agencies.
- e. HSS personnel and materiel requirements have been identified and procedures addressed for obtaining them.
- f. The Theater Evacuation Policy has been formulated and published.
- g. Patient evacuation has been comprehensively addressed and includes all levels of care in support of the operation.
- h. Procedures have been established for augmentation by Air Force Aeromedical Evaluation Liaison Team (AELTs) and Mobile Aeromedical Staging Facility (MASFs), as required.
- i. Procedures have been established for augmentation by Army AE units (air ambulance) (see Appendix C). This currently applies to operations involving use of Navy hospital ships, but with agreement from the Task Force Commander and Army component commander could apply to operations entailing use of Navy Fleet Hospitals.

- j. Procedures have been established for the TF Medical Regulating Control Officer (MRCO) to provide liaison and/or augmentation to the JPMRC/TPMRC to assist in coordinating intratheater patient movement.
- k. C^2 , composition, designations, call signs, and locations for all medical regulating elements are clearly addressed.
- 1. The OPLAN contains specific guidance for coordination with all elements and agencies (possibly other component commands) regarding medical regulating.
- **3.4.2 Factors Affecting Patient Movement.** Many factors can affect the movement of patients; however, the tactical situation will always be the controlling factor. Specific factors include:
- 1. Availability of transportation
- 2. On-hand patient mix, specialty capabilities, Class VIII status, medical equipment status, staffing, location of HSS facilities, and pending displacement of facilities
- 3. Current bed status of facilities (beds occupied/not occupied)
- 4. Surgical backlog of each facility (patients and hours of surgery)
- 5. Number and location of patients by diagnostic category
- 6. Location of airfields or seaports
- 7. Condition of each patient (Is the patient stabilized enough to withstand travel? How urgent are their medical needs?, etc.)
- 8. Communications capabilities.
- 9. Availability of patient movement items (PMI) such as litters, monitors, etc.
- **3.4.3 Contingency Medical Regulating.** Medical regulating in peacetime is usually a function managed by shore-based MTFs located OCONUS. Afloat units should refer to the standing OPLAN or SOPs for information regarding the theater evacuation and medical regulating policies for their current AO. During transit periods, it is customary, where no U.S. military MTF exists, to evacuate ill or injured

personnel requiring additional healthcare to non-U.S. healthcare facilities in foreign countries. Information about available facilities and how to effect such evacuation are contained in appropriate OPLANs and SOPs.

Note

Normally this will not be done unless approved by the CINC or Fleet surgeon.

- **3.4.4 Wartime Medical Regulating.** The wartime regulating of patients between the second and third levels of care is the responsibility of the Service Component Commanders. In the CBTZ, these Component Commanders are also responsible for the evacuation of patients from point of injury/illness to the nearest HSS facility. There is no medical regulating between the first and second levels of care.
- 1. In a joint operation patients are regulated between facilities by the Theater Patient Movement Requirements Center (TPMRC). However, in joint operations a JPMRC may be established to coordinate patient movement within the AOR.
- 2. Component Service HSS facilities may be required to provide support for patients from other services, therefore, service Medical Regulating Offices (MROs) must ensure communication and coordination with the J/TPMRC.
- 3. The movement of patients from Level III to Level IV and subsequent movements from the theater to another theater or CONUS are coordinated jointly by the J/TPMRC and the GPMRC.

3.5 PATIENT MOVEMENT AGENCIES

The following agencies are involved in Patient Movement.

3.5.1 Global Patient Movement Requirements Center. The GPMRC is an agency located at Scott Air Force Base that provides "one stop shopping" for regulating and evacuating patients.

The GPMRC and its supported TPMRCs will function in three modes: deliberate planning, forecasting, and reactive planning. Figure 3-1 outlines GPMRC functions.

- **3.5.2 Theater Patient Movement Requirements Centers.** The TPMRCs serve the unified commander in chief. The primary role of the TPMRC is to coordinate intratheater patient movements. Specifically, TPMRCs will perform the functions outlined in Figure 3-2.
- **3.5.3 Joint Patient Movement Requirements Centers.** JPMRCs may function as free-standing Patient Movement Requirements Centers, coordinating patient movement in an AOR. JPMRCs will perform the same as the TPMRC functions as outlined in Figure 3-2.

3.5.4 Medical Regulating Control Center (MRCC). The MRCC is an operational agency established by a Task Force Commander prior to implementation of an OPLAN, or in the case of a "no plan" scenario, as soon as possible.

The MRCCs primary function is to move/regulate patients from Level II to Level III HSS facilities in the CBTZ. MRCCs also provide liaison or augmentation to the J/ TPMRC.

Functions of the MRCC are outlined in Figure 3-3.

3.6 MEDICAL REGULATING INFORMATION MANAGEMENT SYSTEMS

There are a number of information systems used during the medical regulating process. The system that will be used for any given operation will be identified in the OPLAN.

- **3.6.1 Defense Medical Regulating Information System.** DMRIS is currently used during peacetime operations in most theaters. It can be used during wartime and contingency operations but, as it relies on the Automatic Digital Network (AUTODIN), its use will be limited to those areas where AUTODIN exists.
- **3.6.2 Theater Army Medical Management Information System Medical Regulating (MEDREG) Subsystem.** Theater Army Medical Management Information System (TAMMIS) is the Army's wartime baseline system. Adjustments have been made in the system to accommodate Air Force and Navy requirements. TAMMIS automates specific tasks to manage HSS resources and materiel. The TAMMIS MEDREG subsystem assists the MRO in managing the evacuation of patients so patients' needs and movement requirements are most efficiently matched against available beds and other HSS capabilities. If TAMMIS will be the medical regulating Management Information System (MIS) for the operation; coordination with the Army will be required.

Additionally, a plan should be developed to ensure medical regulating personnel required to use this system are properly trained.

3.6.3 USTRANSCOM's Regulating and Command and Control Evacuation System (TRAC²ES). TRAC²ES is TRANSCOM's C² decision support system designed to integrate medical regulating and patient evacuation, and support and improve patient movement practices. As the system becomes operational and incorporated worldwide, information about operations, etc., will be available locally.

DELIBERATE PLANNING	FORECASTING	REACTIVE PLANNING
Coordinate/allocate lift and bed assets across TPMRCs.	Integrate theater patient movement forecasts.	Receive and disseminate "actual" lift allocations from Tanker Airlift Command Center.
Integrate TPMRCs deliberate plans into a global deliberate plan.	Analyze global patient movement forecasts.	React to TPMRC emergency requests for additional lift and bed assets.
Recommend long-term and major changes to policy, assets, etc.	Resolve contention via distributed and collaborative interaction.	Monitor execution of global patient movement missions.
Integrate overall patient transportation requirements with other OPLAN transportation requirements	Disseminate revised theater patient movement forecasts.	Offer and transmit In-Transit Visibility (ITV).
Analyze deliberate plan.	Request transportation to support the global patient movement forecasts.	Monitor global TRAC ² ES network status.
	Offer primary ITV.	Coordinate activities of TPMRCs.
	Request additional beds (DOD and non-DOD).	
	Update/disseminate forecasting guidance.	

Figure 3-1. GPMRC Functions

DELIBERATE PLANNING	FORECASTING	REACTIVE PLANNING
Generate deliberate patient movement planning for the theater.	Receive/validate patient movement requests.	Receive "actual" lift assignments.
Incorporate commander in chief guidance in theater plan.	Request additional patient information from MTFs.	Make minor modifications to itineraries.
Develop theater evacuation policies.	Generate patient movement forecasts.	Analyze and re-plan patient movement schedules within constraints of actual assets, particularly lift.
Conduct "what if" excursions.	Send primary patient movement forecasts to GPMRC and service components, MRCC, etc.	Request emergency relief (additional beds and lifts).
Integrate theater patient movement planning with theater OPLAN.	Update/disseminate updated theater patient movement policies.	Generate and publish patient movement manifests to GPMRC/MTFs/Aeromedical Staging Facilities (ASFs).
	Analyze patient movement forecasts.	Monitor execution of patient movements.
	Request additional assets as needed.	Coordinate with MRCC, MROs and MTFs as necessary.
	Receive revised patient movement forecasts from GPMRC.	Enter patient movement requests manually for exceptions.
	Offer preliminary ITV.	Monitor TRAC ² ES network status in theater.

Figure 3-2. (J)/TPMRC Functions

DELIBERATE PLANNING	EXECUTION
Develop medical regulating communications requirements for the operation.	Monitor medical regulating communications requirements and adjust as necessary.
Develop MRN station list and locations of Medical Regulating Teams.	Adjust station numbers and locations, as required.
Assist the HSS Planner in developing medical regulating and patient evacuation Appendices.	Modify patient movement Appendix, as required.
Establish procedures for MRN.	Control MRN.
Develop a "patient loading" plan for the operation.	Monitor the "patient loading" and adjust it as dictated by the operation.
Develop medical regulating voice templates, reports, and records requirements for the operation.	Modify voice templates, reports, and records as necessary.
Collocate the MRCC with the Aviation Control Agency (and a Medical Regulating Team with the primary control ship/secondary control ship to ensure the ability to monitor incoming patients).	Monitor evacuation radio calls and provide HSS facility assignments as requested.
During amphibious operations coordinate all of the above with the landing force PEO.	Turn over control of medical regulating when operational control shifts to the Commander, Landing Force ashore.
Provide liaison or augmentation to the J/TPMRC.	Continually monitor and report selected status indicators for each HSS facility supporting the operation.

Figure 3-3. MRCC Functions

CHAPTER 4

Communications

4.1 GENERAL

The success of the patient movement system primarily depends on reliable communications over dedicated and parallel systems. On today's high-tech battlefields, reliable, effective communications are an absolute must and are also one of the most demanded resources on that battlefield. Accordingly, the HSS planner must identify communications requirements early in the planning process. Without dedicated, reliable communications, patient movement will not be possible, and without patient movement, the HSS system will not function effectively.

In all but the most unusual of circumstances, assignment of a radio net dedicated to patient movement is mandatory. Parallel and adjunctive communication systems include teletype, intercom, and messengers.

4.2 COMMUNICATIONS REQUIREMENTS

The development of a communications requirements list for patient movement must be thorough and address initial and anticipated needs. The first item the HSS planner will need to develop is the conceptual structure for the treatment portion of the HSS system. The numbers, types, and locations of HSS facilities for the operation will form the basis of the patient movement system and subsequently, communications requirements. The HSS planner must identify these needs for each phase of the operation. As the operation grows, so too will the requirement for communications support, not just for patient movement, but for all other elements of the operation. Other factors affecting communications requirements will be force dispersion, terrain, weather, and the enemy's ability to interfere with communications nets and systems. The HSS planner must work closely with the communications staff in developing this list.

4.3 COMMUNICATIONS NET

A communications net is a number of stations, using the same frequencies and compatible equipment, grouped together for a specific mission. There are two types of communications nets:

- 1. Directed Net. A net on which Net Control has full control over the use of the net. All transmissions must be cleared and approved by Net Control, with the exception of Flash messages.
- 2. Free Net. On this type of net, transmissions may be sent without clearance from Net Control.
- **4.3.1 Net Control.** Net Control is a designated agency responsible for controlling a specific communications net. It is usually the senior station on the net, but can be the station that best fulfills the required duties of the net. The Net Control's authority is absolute.

1. Net Control Duties:
a. Expedite traffic
b. Maintain circuit discipline and limit extraneous traffic
c. Resolve disputes between stations on the net
d. Monitor and initiate corrective action for security violations, misuse, etc.
2. Subordinate Stations' Duties:
a. Maintain circuit discipline
b. Limit transmissions
c. Comply with corrections
d. Procedure corrections on outgoing messages
e. On a directed net, obtain permission from Net Control to pass traffic.
4.4 THE MEDICAL REGULATING NET
The purpose of the MRN is to pass patient information and provide a rapid means of communications between the MRCO afloat, the PEO ashore and the various Medical Regulating Teams, Patient Evacuation Clerks (PECs) and the J/TPMRC. The MRN ensures that the MRCO/PEO has current information on the capabilities and status of all HSS facilities supporting the operation. The MRN must be dedicated and not used for other than patient movement, medical supplies, blood reporting, and blood and blood products requests within the AO. Units comprising the MRN are pre-designated in the OPLAN/OPORD. Usually, the following will comprise the MRN; however, actual composition will be determined by the operation:
1. MRN composition afloat:

a. MRCC/MRCO (Net Control) Primary and Secondary

b.	Evacuation points
c.	Primary Control Ship (PCS)/Secondary Control Ship (SCS) (Medical Regulating team collocated)
d.	CRTS (Medical Regulating Team collocated)
2.	MRN composition ashore:
a.	Landing Force (LF) PEO (Net Control)
	Medical Battalion Headquarters, Surgical Company, Shock Trauma Platoons, and BESs. Note: The edical battalion does not provide BASs; they come from the Division.
c.	Aviation Movement Control Agency (Patient Evacuation Team collocated)
d.	Evacuation Stations
e.	Beach Master Unit (BMU)
f.	Boat Group Commanders.
g.	JPMRC (or TPMRC).

Stations encountering communication equipment problems or communication difficulties will report them to the appropriate command's communication officer for required action. MRN stations will also submit reports to the MRCO on the nature of the deficiency, estimated time of repair, and recommendations for alternative communications. Additional information on communications can be found in Appendix D.

CHAPTER 5

Patient Movement Operations

5.1 PATIENT MOVEMENT AT SEA

While the movement of patients at sea is frequently referred to as patient or medical evacuation, it entails the full spectrum of patient movement: medical regulating and patient evacuation.

1. Anytime a patient's healthcare needs exceed the capabilities of the HSS facility providing primary support, consideration must be given to moving the patient to a more capable facility. The size and capabilities of HSS facilities afloat vary greatly. There is usually one ship in each TF that serves as the primary HSS facility for the rest of the TF. This ship is usually staffed with appropriate clinical specialists and has emergency surgical capability.

Note

Specific HSS capabilities of U.S. Navy ships are contained in NWP 4-02.

- 2. As discussed later in this chapter, there are a number of positions associated with patient movement. Specifically, the position of MRCO does not normally exist in non-amphibious task forces. Within the aircraft carrier battle group, many of the functions of this position are managed by the Medical Administrative Officer aboard the aircraft carrier.
- 3. In other naval operations, many of the responsibilities outlined in the Commander, Amphibious Task Force (CATF), Amphibious Task Force (ATF) Surgeon, and ATF HSS staff sections on amphibious operations would be applicable to the TF Surgeon and HSS staff.
- 4. As the movement of patients between different ships at sea, and between ships and shore-based facilities is usually accomplished by air (helicopters), HSS personnel must weigh the potential danger of these operations against the patient's clinical needs and the potential benefits of evacuation. Because of this inherent danger, patients should only be evacuated when their clinical condition warrants the additional risks. Other alternatives to evacuation must also be considered. On ships without medical officers, radio consultation with a TF or shore-based medical officer should be attempted before the patient movement process is activated.
- 5. If the decision is made to evacuate the patient, the senior medical department representative should first contact the potential receiving HSS facility to ensure the capabilities exist to support the patient's clinical needs. Evacuating patients without contacting the receiving facility can be just as dangerous for patients as not evacuating them at all. This is especially true when patients are to be evacuated to a foreign medical facility. When evacuating a patient to a foreign medical facility, it is preferable that a

member of the transferring unit's medical department accompanies the patient. (Note: A patient should only have a medical escort if the patient's medical condition requires it.) Whenever possible a non-medical escort should be used. If this is not possible, then a non-medical member of the command should accompany the patient and keep the command informed of the patient's status. The local U.S. Embassy or Mission should assist this individual in the area.

5.2 PATIENT MOVEMENT EN ROUTE TO AN AREA OF OPERATIONS

During underway periods, while ships are away from their homeports or overseas ports, patients may require evacuation from a ship to a shore-based MTF. Ideally, that facility will be a U.S. military treatment facility, however, this option is not always available. There are numerous areas in which U.S. Navy ships operate where there are no U.S. MTFs. In these cases, personnel can be evacuated to a foreign MTF within geographic proximity. In those areas where long distances separate U.S. MTFs, agreements have usually been negotiated with specific countries for emergency healthcare for U.S. military personnel.

- 1. The general process of developing such agreements is accomplished by members of the unified commander's staff, in coordination with the local U.S. Embassy or Mission. Information and procedures for using these facilities is contained in the applicable OPLAN for the specific area. The Medical Annex will usually contain instructions on how to access a facility when emergency care is required.
- 2. During those incidents where there are no local agreements, the local U.S. Embassy or Mission should be contacted and assistance requested. All U.S. Embassies and Missions have procedures for effecting such support.

5.3 PATIENT MOVEMENT DURING AMPHIBIOUS OPERATIONS

The most demanding patient movements will take place during amphibious operations for two primary reasons: (1) the nature of the operation (potential for high numbers of casualties); and, (2) the lack of HSS resources during the initial build-up phases of the operation.

Establishing a functional patient movement system for amphibious operations requires closely coordinated planning efforts between the ATF and LF HSS staffs.

Note

This section provides specific patient movement TTP for amphibious operations, however, the basic techniques and principles are applicable in all NEF operations.

5.3.1 Health Service Support During Amphibious Operations. HSS during conventional amphibious operations is provided in two elements: (1) afloat by the CATF utilizing CRTSs; and, (2) ashore by the CLF using organic HSS assets.

- 1. The first HSS personnel ashore are unit corpsmen assigned to the various combat elements involved in the assault. BASs move ashore in designated waves with their battalions. As the Landing Force Support Party (LFSP) phases ashore, evacuation stations are established and begin receiving patients. Patients move from the site of injury to the BAS or evacuation station for initial stabilization and are either RTD or evacuated seaward to a waiting CRTS. Patients may be moved by air or by surface craft directly to ships off shore.
- 2. As the LF secures the beach and surrounding area, the Medical Battalion's assets move ashore. These assets, once established, will provide initial Level II care. The LF will continue to rely on the ATF for support until the later stages of the operation.
- **5.3.2 Basic Concepts of Patient Movement Execution.** The next phase of the patient movement process normally calls for the movement of patients by surface and helicopter transport, as well as other assets under CATF control, to designated CRTSs. The preferred method of tactical evacuation is by helicopter. However, during the initial assault phase, evacuation by helicopter may not be feasible because of the tactical scenario, therefore, surface evacuation of patients must be deliberately planned. Normally, helicopters or landing craft boats carrying patients will not be regulated to more than one destination.
- 1. One of the purposes for medical regulating is to assure prompt medical treatment for the greatest number of patients evacuated. For example, the primary objective in routing a helicopter loaded with patients requiring general and orthopedic surgery and one head surgery will not be to an HSS facility having neurosurgical capability. It will be regulated to a facility with the least or no surgical backlog, without regard for the availability of a neurosurgeon.
- 2. Patient regulating personnel ashore report the numbers and types of patients requiring evacuation. The MRCO recommends the desired destination HSS facility to the aviation or ship Movement Control Agency (MCA) for movement of the patients. The MCA can reject or accept the recommendation based on tactical circumstances and availability of transportation assets. If rejected, the MCA will request and/or recommend alternative sites. This coordination ensures that the patient receives the most appropriate care, no HSS facility is overloaded, and the tactical situation is not negatively impacted. Advantages of this system are:
- a. Both the HSS and combat units report their need for patient evacuation through a coordinated and consolidated communications network.
- b. Communications between the MRCO and the MCA ensure coordination for medical regulating and patient evacuation and contribute to enhanced patient tracking capability.
- c. HSS facilities are able to plan and prepare for the reception of patients.

- **5.3.3 Patient Movement Operations.** Following are general principles of operation for the patient movement system.
- 1. Initially, the MRCO, alternate MRCO, and Medical Regulating Teams must be able to monitor the nets over which medical evacuation is requested. This requires dedicated space, communications equipment and collocation with the aviation control agency [MRCO], ship control agency [alternate MRCO], and CRTSs (Medical Regulating Teams). If the MRCO and alternate MRCO cannot be collocated with their respective Movement Control Agency, instant and reliable communications between the two must be provided. As the operation progresses, the LF patient evacuation assets will be included on this net. In addition, reliable communications with the J/TPMRC are essential.
- 2. During lifts of opportunity, helicopter crews can assist medical regulators by reporting the numbers and types of patients to their MCA. The MCA then notifies the appropriate medical regulating system asset of the inbound patients. (Unless requested, medical personnel do not talk directly to helicopter crews.) During the Assault Phase, the aviation control agency directs helicopters (providing medical evacuation lifts of opportunity) to locations consistent with the helicopter's operational mission (not necessarily a CRTS). Patients may need further regulating from these drop-off points.
- 3. The patient movement system should not be the primary means used in de-escalating a mass casualty situation. Doing so could render the system ineffective by over-tasking all available medical regulating/patient evacuation assets. The primary effort should be to deconflict the mass casualty situation through a combination of stabilization, evacuation, and HSS augment of the facility experiencing the mass casualty situation. This will ensure immediate adequate support and permit the patient movement system to continue functioning in support of *all* users.
- 4. Walking wounded personnel who are forward of the nearest aid station are not regulated. They are released by their units and given specific instructions on their route to the BAS, Evacuation Station, STP or nearest HSS facility. The Level II HSS facilities ashore are positioned to support specific units or a specific geographical area. Once a determination is made that a patient requires evacuation seaward, medical regulating starts.
- 5. Personnel from the Medical Battalion coordinating patient evacuation should be collocated with Evacuation Stations, clearing stations, and other HSS facilities. These personnel will communicate with the LF PEO/ATF MRCO via the MRN.

Note

The medical regulating system is neither a substitute for nor a complement to the combat patient reporting process. "Marine Corps Casualty Procedures Manual," MCO P3040 series and the "Bureau of Naval Personnel Manual" clearly describe the responsibilities and procedures for the combat patient reporting process.

- **5.3.4 Patient Movement Responsibilities During Amphibious Operations.** The following sections provide a general discussion of patient movement functions and respective agency responsibilities during the various phases of a conventional amphibious operation.
- **5.3.4.1 Preparation Phase.** As in all phases of an operation, coordinated and concurrent planning is of paramount importance. It is essential that those personnel in charge of planning and conducting medical regulating functions closely coordinate their actions.

The CATF and CLF Surgeons and supporting HSS staffs must realize that patient movement is not solely an HSS function. The success of patient movement will depend on coordination with other staff directorates. The OPLAN and OPORDs, including applicable appendices, must address medical regulating, patient evacuation, and en route care to the extent possible. Without the support of other elements of the TF and LF, patient movement cannot be accomplished; thus, the importance of comprehensive planning and coordination cannot be over stressed.

- **5.3.4.1.1 Commander, Amphibious Task Force.** The CATF, through the ATF Surgeon and ATF HSS staff, is responsible for the overall formulation of the Services' patient movement system. The CATF generally exercises command and control (C^2) over Services' patient movement through the ATF Surgeon and, specifically, through the MRCO. Specific responsibilities include:
- (1) Addressing the patient movement system in sufficient detail in the OPLAN to provide required policies and guidance for the operation, including the Theater Evacuation Policy, if not stated in a higher echelon OPLAN.
- (2) Ensuring that a CRTS has been clearly designated in the OPLAN and has the appropriate medical augmentation assets on board.
- (3) Ensuring that the Communications Annex to the OPLAN establishes an MRN and appropriate procedures for the conduct of patient movement among the ships of the TF.
- (4) Ensuring that the HSS Plan and the Air Plan address requirements for the MRCC/MRCO to be collocated with the aviation control agency, and provides liaison or augmentation to the J/TPMRC in order to ensure reliable communication during operations. The alternate medical regulating control agencies and subordinate medical regulators must have the same relationship with the subordinate aviation control agencies.
- (5) Ensuring that the OPLAN identifies patient movement assets aboard the PCS and SCS.
- (6) Reestablishing and maintaining control [Net Control] of the MRN, until OPCON is passed ashore to the CLF.

- (7) Identifying and requesting appropriate personnel augmentation to staff the medical regulating system, including the J/TPMRC.
- (8) Requesting Air Force AELT(s) and MASF(s) to facilitate evacuations out of the Amphibious Operation Area (AOA).
- (9) Identifying the ATF MRCO and other ATF patient movement staff members.
- (10) Ensuring that all members of the ATF patient movement system have been appropriately trained in patient movement and understand the procedures employed in the patient movement system before being assigned as a team member.
- (11) Monitoring patient movement throughout the operation.
- **5.3.4.1.2 Commander, Landing Force.** In conjunction with the ATF HSS staff, the LF Surgeon and HSS staff shall coordinate and plan LF patient evacuation and medical regulating to ensure seamless transition with the ATF patient movement system. The LF Surgeon must be prepared to assume patient movement responsibilities when OPCON passes ashore to the CLF. Specific responsibilities include:
- (1) Ensuring that the Medical Appendix of the LF OPORD addresses the patient movement system in sufficient detail to ensure a seamless transfer of the patient movement system ashore, when appropriate.
- (2) Ensuring that HSS assets (BASs and Medical Battalion Units) are clearly identified and move ashore with appropriate serials.
- (3) Ensuring that the Communications Plan includes activating and operating the MRN.
- (4) Ensuring that the Air Plan and Embarkation Plan contain provisions for the LF PEO and the alternate LF PEO to be collocated with the primary and alternate air control agencies, respectively.
- (5) Ensuring that patient movement personnel are assigned to each HSS facility ashore and that they embark on the same ship/boat and land in the same serial as that unit.
- (6) Ensuring that procedures are in place that permit the LF command post to alert the LF PEO of large numbers of patients being evacuated from the forward areas.

- (7) Coordinating with the G/S-3 (Operations) about task organization and the Landing Plan, G/S-4 (Logistics) for embarkation, Air Officer for helicopter operations, and the Communication/Electronics officer for communication support.
- (8) Ensuring that all members of the LF patient movement system have been trained and understand the proper procedures for the system before being assigned as a PEC.
- (9) Monitoring patient movement throughout the operation.
- **5.3.4.1.3 Patient Movement Preparations.** During this stage, initial preparations and placement of patient movement personnel takes place as follows:
- 1. Within the ATF:
- a. The MRCC, headed by the MRCO and staffed by a Medical Regulating Team, is on the CATF flagship, collocated with the CATF Surgeon. An alternate MRCC is located on the ship designated as the alternate tactical air control center. Liaison or augmentation to the JPMRC (or TPMRC) is provided. The MRCC will have direct access to the MRN and function as net control until control is transferred ashore. The MRCC should be collocated with the TF aviation control agency.
- b. Medical Regulating Teams are placed on the PCS/SCS and each CRTS. Like the MRCC, the location of the Medical Regulating Team is with its supporting Movement Control.
- c. The PCS and SCS each have a Medical Regulating Team located in or near the CIC. If the Medical Regulating Team is located outside CIC, then the Team must have effective and reliable communications with CIC. The Team must receive current information regarding patients requiring surface craft evacuation to a CRTS or the use of service craft to evacuate patients. After receiving information from the MRCO, the Medical Regulating Team informs the PCS/SCS staff of the primary and secondary destinations for patients requiring evacuation.
- d. The MRCO determines the need and locations for other afloat Medical Regulating Teams and makes recommendations to the CATF Surgeon. Any ship that could possibly receive patients may have a Medical Regulating Team assigned. If the ship receiving patients is not equipped to care properly for them, the Medical Regulating Team notifies the MRCO who arranges for the transfer of these patients to a CRTS.
- e. The MRCO, in conjunction with the ATF Surgeon, develops a patient "loading plan" for the ATF CRTS(s).
- f. The MRCO develops procedures for transporting patients to HSS facilities.

- g. The MRCO establishes procedures for initiating radio or message traffic regarding patient evacuation.
- h. The MRCO receives and transmits information regarding HSS capabilities, patient evacuation status, and other information over the MRN.
- i. The MRCO maintains a spot status board on HSS facility status and capabilities.
- j. Ship Medical Department notifies the MRCO whenever a change in status (new patients, transferred patients, etc.) occurs in their department.

Note

Examples of the various reports, forms, and status boards used during medical regulating operations are contained in Appendix E.

- 2. Within the LF:
- a. The Medical Battalion of the Force Service Support Group (FSSG) provides patient evacuation personnel assets [LF PEO and PECs] for the LF through the Combat Service Support Center.
- b. The LF PEO embarks on the same ship as the LF aviation Movement Control Agency and lands in the same serial as that agency.
- c. Once ashore, the LF PEO collocates with the LF aviation Movement Control Agency. If collocation is not possible, the location of the LF PEO is adjacent to the LF aviation Movement Control Agency. The LF PEO must have effective and reliable communication with the LF aviation Movement Control Agency.
- d. The LF PEO guards the MRN and monitors requests for patient evacuation.
- e. The LF PEO has reliable communication via the MRN with each LF PEC located at the various LF HSS facilities, with the LF alternate PEO, with the ATF MRCO, and with the J/TPMRC.
- f. The LF PEC with the Evacuation Station has communications with the MRCO and may serve as a relay station should communications deteriorate between the LF PEO and MRCO.

- g. The Evacuation Station has reliable communications with air and surface elements of the Landing Support Battalion.
- h. The alternate LF PEO relationship with the alternate LF aviation Movement Control Agency is identical to the relationship between the LF PEO and LF aviation Movement Control Agency. The same requirements apply to embarkation, landing, location, and communications.
- i. Each LF PEC embarks on the same landing craft and lands in the same serial as the unit it supports ashore.
- j. LF PEO/LF PECs monitor air and surface evacuation nets continuously and act on requests from net control for patient movement.
- k. The Evacuation Station functions as the collection, triage, emergency treatment, and evacuation agent for patients received on the beach or in the landing zone.
- 1. The Evacuation Station establishes communications with the beachmaster element helicopter support team.
- (13) The LF PEO maintains a duplicate master facility spot status board for the LF.
- (14) The LF PEO is prepared to assume the duties of MRN Control when OPCON shifts ashore with the CLF.
- (15) The LF Communications Section provides the LF PEO and LF PECs with the proper communication equipment, classified materials, publications, and supporting services.
- (16) The LF Communications Section provides the LF PEO with telephone connectivity to the LF telephone system.
- (17) The LF Communications Section provides communication links between the Evacuation Stations, beachmaster, and shore party commander.
- (18) LF HSS assets, once operational, submit an initial report of their capability [medical joining report] to the MRCC.
- **5.3.4.2 Initial Assault Phase.** The Evacuation Station will establish with the LFSP.

- 1. Once the Evacuation Station has been established (either on the beach or in a landing zone), patients will be collected and triaged at the Evacuation Station prior to evacuation to the ATF. Evacuation of patients is not delayed during the initial assault. The "patient loading" plan pre-identifies the preferred destination for patients from the initial assault. However, each helicopter/landing craft has a dedicated tactical mission, therefore, they probably will not be diverted for medical missions and will normally return to their "mother" ship to pick up the next load of troops/supplies.
- 2. Initially, casualties are given emergency medical care by their unit corpsmen and evacuated rearward to the Evacuation Station. There they are triaged, treated or stabilized and RTD or placed aboard helicopters or landing craft for evacuation to the ATF. The helicopter or craft reports to its Movement Control Agency the number, type, and, if possible, the classification of patients on board. The MRCO (located with the Aviation Movement Control Agency or alternate MRCO (located with waterborne Movement Control Agency) will request primary and alternate destinations for these patients. The appropriate Movement Control Agency will try to accommodate such requests when the tactical situation permits. The cognizant Medical Regulating Team will notify its ship when patients are being evacuated to it.
- 3. Upon arrival at a ship, patients will be retriaged and those requiring movement to another ship [CRTS] will be reported to the controlling MRCO for transfer. The MRCO will arrange an inter-ship transfer by medical boat or helicopter.
- **5.3.4.3 Build Up and Consolidation Phase.** Initially (during the Preparation and Initial Assault Phases), HSS support and regulating of patients are the primary responsibility of the CATF. As the operation progresses and LF medical elements have been phased ashore, responsibility and provision of HSS are shared between the ATF and LF.
- 1. The Commander Landing Force (CLF) comes ashore as the logistical support base continues building. In preparing for transfer of control ashore, the LF PEO requests spot status reports from the HSS facilities PECs and CRTS Medical Regulating Teams to update the LF Facilities Spot Status Board. Control of patient movement passes from the MRCO to the LF PEO when the CLF assumes OPCON ashore. Concurrently, control of aircraft is transferred from the TF aviation Movement Control Agency to the LF aviation Movement Control Agency. The MRCO continues to guard the MRN in the event that control is passed back to the ATF. Whenever the LF aviation Movement Control Agency yields control of helicopters to another agency, either the alternate LF aviation Movement Control Agency or the ATF aviation MCA afloat, the LF PEO passes the patient movement responsibilities to the appropriate alternate LF PEO or the MRCO.
- 2. During this phase, Level III care is usually established ashore in Navy Fleet Hospitals or provided off shore by Navy Hospital Ships. The LF PEO will coordinate all regulating of patients to these facilities. Additionally, Air Force AE assets can be assigned to a secure airfield ashore to provide intratheater AE.

5.3.4.4 Termination of Amphibious Operations. The CATF may withdraw with the concurrence of the CLF when the Forward Line of Own Troops (FLOT) extends inland and the logistical support base is well established. At this point, responsibility for HSS falls entirely on the CLF, and is exercised through the LF Surgeon. An AELT attached to the MASF can be assigned to assist the LF. Evacuation and regulating of patients out of theater will be coordinated with the TPMRC.

5.4 PATIENT MOVEMENT IN JOINT AND COMBINED OPERATIONS

Patient movement during joint operations remains the same for Levels I and II, except that MRCOs and PEOs may be called upon to provide assistance to injured or ill personnel from other services.

As the theater matures and Level III facilities become active, the JPMRC (or TPMRC) will become more involved in the patient movement process, regulating all patients between Level III HSS facilities. This activity will require coordination input from the Navy MRCO and Navy and Marine Corps HSS facilities.

5.4.1 Interface with United States Army (USA)/United States Air Force (USAF). From the point of injury to Level III, Service component commands are responsible for patient movement. This is usually accomplished through a combination of litter carries, manual carries, ground transport, and limited air transport. The Army and Air Force employ dedicated patient evacuation air assets. The Army is responsible for providing medical rotary-wing support to ship-to-shore and shore-to-ship patient movement if specified in the OPLAN. This encompasses all Services operating in the assigned grid coordinates. Requests will be prioritized by urgency. The planning of this arrangement will reflect the commander's concept of operations and availability of assets. Otherwise, Navy and Marine Corps units have the responsibility for this phase of patient movement. The Air Force is responsible for providing fixed-wing aeromedical transport. This is used to transport patients intratheater, from the combat zone to medical care in the communications zone, and from the communications zone to and within other theaters.

5.4.2 Interface with Combined Forces. Patient evacuation may be performed in coordination with combat operations, troop movements or logistic movements. JFCs must integrate and coordinate the use of evacuation resources towards the common goal of reducing mortality while maintaining medical treatment, theater, and subordinate joint force objectives. Each service must coordinate their plan with overall patient movement operations.

Note

Specific guidance for medical regulating during joint operations is contained in Joint Pub 4-02.2, "JTTP for Patient Movement in Joint Operations."

5.5 PATIENT MOVEMENT EXECUTION IN MILITARY OPERATIONS OTHER THAN WAR (MOOTW)

Each MTF must have a standard operating procedure (SOP) for peacetime patient movement. There should also be a plan for peacetime mass casualty situations. These mass casualty plans are normally developed and written by the Disaster Preparedness Committee at each Navy MTF.

The three categories of evacuation precedence are urgent, priority and routine. The Global Patient Movement Requirements Center (GPMRC) located at TRANSCOM, Scott Air Force Base, coordinates intertheater, SOUTHCOM and CONUS patient movement for all categories of eligible beneficiaries for all Services. Currently, DMRIS is used to request movement of patients. For intertheater, SOUTHCOM and CONUS activities, GPMRC authorizes and grants site numbers for movement and coordinates with components for evacuation. OCONUS activities use the TPMRC in the Pacific Command (PACOM) for Asia and the Pacific Region and the TPMRC in the European Command (EUCOM) for European, Middle East, and African countries.

MTFs identify that a patient requires movement and enter the necessary information in DMRIS. The GPMRC or TPMRC in EUCOM or PACOM authorizes movement for their respective regions of the world. DMRIS will identify the nearest MTF that has an available bed and can provide the needed services. Each MTF should ensure DMRIS is kept updated (at least semi-annually) on the capability of their facility. This will prevent patients from arriving at MTFs that do not have the capability of treating certain cases. If there is a need to move a patient who is attached to a deploying platform back to their homeport, the request will be made in DMRIS and all accommodations will be made, if possible. Entry of all pertinent information will be made by the MTF moving the patient. The MTF must provide care until the patient(s) can be transported to the next level of care. In peacetime, an accepting physician is generally required before movement authorization can be made. If a priority move is necessary to a site that does not show up in DMRIS as "closest with capability," a request for "Exception to Policy" can be submitted to GPMRC or the respective TPMRCs. The transferring MTF must identify whether the patient is ambulatory or litter bound.

Refer to Section A6 of Appendix A for the required forms used in patient evacuation. The transferring MTF is responsible for having the patient at the aeromedical evacuation site at the required time for patient movement. Communication between the transferring MTF and GPMRC and the TPMRCs is critical to the success of the mission. Communication to the transferring MTF from the designated MTF is usually in the form of a message that the patient has arrived. For active duty service members it is very important that the member's command is notified via message:

- 1. When the patient arrives.
- 2. When there is a significant change in the patient's condition.
- 3. When the patient is discharged/transferred.
- 4. Weekly updates as long as the patient is being treated.

For urgent patient movements, assets organic to a particular command are utilized. GPMRC or the respective TPMRCs can provide invaluable assistance during this evolution.

5.5.1 Interface with Host Nations. Medical forces must be tailored to meet the HSS requirements for each MOOTW. Due to the limited availability of MTFs, other assets may be required to provide necessary medical care. The geographic commander is responsible for developing patient movement policies that address requirements to treat and move allied or host nation personnel. Host nation resources may be used depending upon the location of the operation. In less developed countries, the

geographic commander may recommend not using host nation assets. Therefore, commanders may use a point-to-point patient movement system from a single evacuation site to a designated reception hospital that meets the criteria to treat the patients.

5.5.2 Interface with United Nations Forces/Allies. MOOTW may also include United Nations Forces or allies. Therefore, a forward deployed U.S. medical presence may not be necessary. Consideration should still be given to the responsibilities for attendants, special medical equipment, and the overall coordination of the concept of operations.

5.6 PATIENT MOVEMENT CONSIDERATIONS FOR SPECIAL OPERATIONS FORCES

Special Operations Forces (SOF) are usually assigned to a separate component command (Special Operations Command), the same as service forces. The key difference is that the Special Operations Command will frequently rely on the service component commands for much of their logistical support. In special situations or selected operations, special medical augmentation packages can be attached to these units.

- 1. As with conventional forces, the provision of Level I and II care will be the responsibility of the component commander (Special Operations Command). This includes patient evacuation, but not medical regulating. Specific guidelines for patient evacuation and medical regulating of SOF will be contained in the OPLAN.
- 2. The SOF HSS planner must coordinate closely with the TF Surgeon and HSS staff during the preoperational planning phase for required HSS. Because of the operational security associated with special operations, the SOF HSS planner may only be able to provide a list of required HSS support without additional information. Such requests must be accepted as presented and the required support provided, if within the capabilities of the TF.
- 3. In deep operations or when the theater has not developed fully enough to allow the TAES to be used effectively, the primary means of tactical AE will be the SOF aviation elements and assets conducting the clandestine or covert operation.
- 4. The nature of special operations frequently places SOF long distances from the established HSS system for the operation. Accordingly, during evacuation of SOF, coordination with the Special Operations Command or other SOF command element is essential for the assignment of in-flight medical personnel to accompany the flight. Otherwise, a SOF medic will have to accompany the patient, frequently leaving the mission without proper medical support or the patient will have to be evacuated without en route care.
- 5. During some special operations, the established HSS system will provide evacuation support for SOF as it does for conventional forces.

6. During intense or sustained special operations, the theater Special Operations Command cannot afford to lose the services of SOF personnel who become casualties but who can be treated and RTD at HSS facilities within the COMMZ. As an exception to the Theater Evacuation Policy, the TFC can retain these personnel in theater where they can return to their units on limited duty and assume the support duties performed by other SOF personnel.

Note

Medical regulators and PEOs must be prepared for this eventuality. SOF personnel whose clinical condition is not critical or who do not require emergency life saving intervention will not be regulated out of the theater without coordination with the theater Special Operations Command.

5.7 CONCEPTS OF JOINT PATIENT MOVEMENT OPERATIONS

The Theater Evacuation Policy will be the key element in determining the size and capabilities of the theater HSS system. It will also form the basis for concurrent HSS planning outside the theater.

- 1. A shorter Theater Evacuation Policy:
- a. Results in fewer hospital beds required in the theater and a greater number of beds required out of the theater.
- b. Creates a greater demand for intertheater strategic lift and patient evacuation resources.
- c. Increases the requirements for replacements to meet the rapid personnel turnover that could be expected, especially in combat units.
- 2. A longer evacuation policy:
- a. Results in a greater accumulation of patients and subsequently a demand for a larger HSS system in theater. It decreases bed requirements outside the theater.
- b. Increases the requirements for HSS materiel and maintenance, and non-medical logistic support.
- c. Increases the requirements for hospitals, special engineering support, and all aspects of base development for HSS.
- d. Provides for a greater proportion of patients to RTD within the theater, thus reducing the loss of experienced manpower.

5.7.1 Intratheater Patient Movement Operations. Intratheater patient movement is the process or system by which patients are evacuated among MTFs within the theater of operations. When patients are received at a relatively constant rate, the evacuation policy at a specific level may be adjusted to retain or RTD those patients who do not require specialized treatment in a Communications Zone (COMMZ) or CONUS MTF. However, when increased patient loads are anticipated, the evacuation policy must be readjusted to make additional beds available for current and anticipated needs. As a result, a larger number of patients admitted in the Combat Zone (CBTZ) are evacuated to the COMMZ much earlier than under previous conditions.

The displacement of theater medical facilities can temporarily reduce the number of beds available and may require a temporary adjustment to the Theater Evacuation Policy resulting in a greater number of patients being evacuated out of the CBTZ/AOR during the period of the relocation.

5.7.2 Intertheater Patient Movement Operations. Intertheater patient movement includes movement of patients from one theater to another, or CONUS, and is provided by United States Transportation Command (USTRANSCOM). Sealift may be used when necessary. The Tanker/Airlift Control Center (TACC) controls the aeromedical evacuation and is coordinated through the Global Patient Movement Requirements Center (GPMRC). The transferring MTF is generally responsible for the transport of patients from the facility to the Air Force's Aeromedical Staging Facility. The receiving facility is responsible for patient reception. USTRANSCOM uses dedicated, preplanned, opportune, or retrograde aircraft missions to transport patients.

5.8 TRANSPORT OF CASUALTIES OF CHEMICAL/BIOLOGICAL/RADIOLOGICAL EXPOSURE

Patients who are contaminated with nuclear, biological, or chemical agents will normally be decontaminated prior to evacuation. Contaminated patients will not routinely be enplaned on aircraft. If an aircraft becomes contaminated as a result of transporting contaminated patients, it would have to be flown to a remote site for decontamination which would take it out of service for an extended period of time.

CHAPTER 6

Postdeployment Critiques and Lessons Learned

6.1 GENERAL

It is important to maintain valuable information obtained during medical regulating and patient evacuation operations. The information can confirm procedures and processes already in place and identify areas requiring improvement. This process is accomplished through the preparation and submission of Postdeployment Critiques and Lessons Learned reports.

6.2 POSTDEPLOYMENT CRITIQUES

The Postdeployment Critique is an after-action report of significant occurrences during a deployment. The operational commander uses the critique to record medical regulating and patient evacuation activities that occurred during deployments or specific missions. It also identifies areas needing further evaluation. Appendix F contains additional information.

6.3 LESSONS LEARNED

The various Lessons Learned systems provide information on improvements accomplished and areas needing correction. The MRO or PEO prepares Lessons Learned in accordance with OPNAVINST 3500.37 Series for incorporation into the Navy Lessons Learned System, Marine Corps Lessons Learned System, and the Joint Universal Lessons Learned System. These are submitted in the Joint Universal Lessons Learned System format through the appropriate chain of command with information copies submitted directly to additional commands as appropriate.

APPENDIX A

Patient Evacuation CONTENTS

	Page
Section A1	General Patient Evacuation
Section A2	Aeromedical Evacuation
Section A3	Theater Aeromedical Evacuation System
Section A4	Aeromedical Evacuation Elements
Section A5	Patient Preparation for Aeromedical Evacuation
Section A6	Patient Evacuation Forms
Section A7	Classification and Precedence of Patients for Aeromedical Evacuation

SECTION A1

GENERAL PATIENT EVACUATION

A.1 GENERAL

It is counterproductive to differentiate between medical regulating and patient evacuation. The medical regulator frequently coordinates and submits requests for evacuation and, in amphibious operations, the LF PEO will actually regulate patients once OPCON has passed ashore to the CLF. Whenever possible, it is important to consider all patient movement functions (i.e., medical regulating, patient evacuation and en route care). Nonetheless, this section provides a general overview of patient evacuation operations as they relate to naval medical regulating. Specific guidance can be found in Fleet, Marine Force, Component, and Unified Command Directives, Instructions, and SOPs. Additionally, during actual operations, the OPLAN and OPORDs will contain operation specific procedures for medical regulating and patient evacuation.

A.2 PATIENT EVACUATION OPERATIONS

Patient evacuation is the process of moving any person who is wounded, injured, or ill to and/or between medical treatment facilities.

Because patient evacuation is not solely an HSS responsibility, it is important for the medical regulator to understand the overall process, including participating agencies and specific responsibilities of each agency.

- **A.2.1 Participating Agencies and Their Responsibilities.** As stated above, numerous non-HSS agencies participate in the patient evacuation process and many times it will be the medical regulator who coordinates the efforts and actions of these agencies. The following descriptions of agencies and their responsibilities will be presented in "timeline" fashion to assist in understanding not only "who" and "what" the agencies are, but also "when" they perform their duties.
- **A.2.1.1 Communications Agencies.** Even before the operation commences, the Communications Plan for the operation must consider communications requirements in support of medical regulating and patient evacuation.
- 1. This, at a minimum, will consist of the MRN and the inclusion of patient evacuation communications procedures for various other nets.
- 2. In addition to specific nets, the communications staff, in conjunction with the HSS staff, will develop the procedures for requesting evacuation (planned) and reporting evacuation (emergency/lifts of opportunity).

- 3. Finally, arrangements must be made with the various Movement Control Agencies, the JPMRC (or TPMRC), and other C^2 elements to collocate patient movement assets with these elements.
- **A.2.1.2 Transportation Agencies.** Equally important are the transportation or movement elements that will actually be evacuating the patients. These elements will either provide the actual *means* (aircraft, ground vehicles, boats, etc.) for moving the patient(s) or the tasking to these elements (i.e., HDC, PCS, DASC, etc.). The medical regulator will work closely with these elements, before, during, and even after the operation.
- 1. The Theater Evacuation Policy, Casualty Estimate, and HSS Estimate will provide a general "picture" of casualties by time (day of operation (M or D)), location (unit/geographical location), and type of casualty (WIA/DNBI), and the HSS system by unit type (level of care) location and in-service time (M or D-day). This information will form the basis for patient movement requirements. It will also provide the transportation planners with an idea of the numbers and types of means required to support the patient movement system.
- 2. Specific information on transportation means and capabilities are contained in Appendix B.
- **A.2.1.3 Other Services/Joint Agencies.** There are a number of other agencies or elements that will have equally important roles in patient evacuation.
- 1. The logistics agencies may be involved in providing the required PMI and the military police will provide security for EPWs and detainees.
- 2. The local U.S. Embassy or Mission (or designated allied embassy when a US Embassy or Mission doesn't exist) could be involved in coordinating local hospitalization. They will also coordinate aircraft and personnel entry clearances, etc.
- 3. In large operations, other Service medical regulators, HSS facilities, and HSS transportation assets could be involved.
- 4. In combined, coalition, or United Nation's operations, direction and support for US forces will come from the U.S. Commander, Joint Task Force (CJTF).

Note

It is important that the medical regulator understands the close, often overlapping, relationship that exists between these elements of the patient movement system.

A.3 FUNCTION OF THE MRO/PEO IN EVACUATING PATIENTS FROM THE AO

- 1. The TF MRO or LF PEO consolidates all requests for tactical evacuation from supported HSS facilities. The request identifies patients by the wartime contingency categories, patient classification code, and patient evacuation precedence (Appendix A Section A7).
- 2. The TF MRO or LF PEO reports to the JPMRC (or TPMRC), by message or voice, those patients who can be evacuated out of the AO. Detailed guidance will be in the OPLAN/OPORD. Regulators should verify these and other requirements in the applicable OPLAN.
- 3. The TF MRO/LF PEO reports patients requiring evacuation to the JPMRC (or TPMRC). This process may be facilitated by an AELT.

Note

Evacuations out of the AO will not usually begin until a secured, fixed wing airfield is available.

- 4. Patient movement must take into account delays caused by the tactical situation. Under ideal conditions, movement requirements will be met or accomplished ahead of schedule according to the availability of aircraft.
- 5. Upon receipt of a movement request, TPMRC will determine the availability of in-theater HSS facilities. If none are available, the TPMRC will consult with the GPMRC for destination MTFs in another theater or CONUS. TPMRC will assign a movement control number to either each patient requiring transportation, or to each movement request.
- 6. Upon notification of the airlift itinerary, the TF MRO/LF PEO contacts the holding HSS facility(s) and verifies that:
- a. Patients are stabilized before flights. (See Appendix A Section A5 for general patient preparation guidelines.) Litter patients are transported on a litter with a minimum of two blankets, one sheet, one pillow, one pillowcase, two litter straps, and medical records. The AE system does not provide litter exchange. Replacement litters, supplies, and other patient movement items (PMI) must be obtained through a PMI Cell (co-located at a MASF or other established location).
- b. For each mission, patients are manifested on DD Form 601, "Patient Evacuation Manifest." All baggage is tagged using DD Form 600, "Patient's Baggage Tag." DD Form 602, "Patient Evacuation Tag," prescribes the treatment to be provided en route, and is attached to the patient's clothing or litter.
- c. Each patient is accompanied by a sufficient supply of medicine and IV fluids (normally a three-to five-day supply).

- 7. The MRO/PEO ensures that HSS facilities deliver patients to the MASF at least 30 minutes (but not more than six hours) before the estimated flight. One to two hours before flight time is preferable. The MASF personnel check all patients and records upon arrival to ensure proper preparation. Patients are prepared for the flight and supportive care is continued until the aircraft arrives.
- 8. Occasionally, the airlift of patients is postponed or canceled. The JPMRC (or TPMRC) notifies the TF MRO/LF PEO to retrieve patients and place them in appropriate HSS facilities until evacuation is rescheduled. If practical, these patients are not returned to CRTSs.
- 9. The MRO confirms departure of the evacuation flight with the MASF. Once the departing patient manifest is confirmed, the MRO requests current spot status reports from HSS facilities to update the master boards.

SECTION A2

AEROMEDICAL EVACUATION

A.4 AEROMEDICAL EVACUATION

- 1. AE is the movement of patients, under medical supervision, by air, from one HSS facility to another along the established levels of care in the HSS system. It is the preferred method of patient evacuation as it provides for the rapid movement of patients from one HSS facility to another, and as such, ensures a greater continuity in required care.
- 2. Initial evacuation of patients is a component command responsibility. This refers to evacuation from site of injury or onset of illness through Level I and Level II to Level III HSS facilities. Coordinated intratheater patient movement is the responsibility of a JPMRC (or TPMRC). Intertheater patient movement is coordinated by the GPMRC.
- 3. In the lower levels of care, evacuation of patients is managed by the individual unit commander, i.e. directs or moves patients along pre-established routes of evacuation from the front line to a Level II HSS facility. Movement at this level can be by one of the three methods of evacuation: ground, water, or air. In most instances, ground or water transportation will be the primary means of moving these patients. Air assets are crucial to the establishment of battlefield superiority, and their use in evacuation operations will be secondary to the primary tactical missions of these aircraft. Use of these critical assets is almost solely limited to "lifts of opportunity." As the tactical situation becomes more stable, these aircraft can be used on a more regular basis to move patients farther rearward, but until that condition exists, patients will be moved primarily by available ground transportation assets, as well as Navy small boats returning to their launch platform.
- 4. Regardless of the means, the TF MRO/LF PEO must maintain constant surveillance and coordination of medical regulating and patient evacuation operations to ensure that patients are moved to HSS facilities ashore and afloat capable of providing the required level of care and with available space. Uncoordinated evacuation of patients can completely overwhelm an HSS facility and result in unnecessary mortality and increased morbidity.

SECTION A3

Theater Aeromedical Evacuation System

A.5 THEATER AEROMEDICAL EVACUATION SYSTEM

DOD has established the policy that in wartime, the movement of patients (U.S. military) will be accomplished by air when airlift assets are available and AE is tactically feasible.

The air component commander has the responsibility for providing a TAES in times of war or MOOTW and is assisted in this mission by Air Reserve Component AE supporting units.

- 1. As the theater matures or as directed by the CJTF, the air component commander will establish a TAES. Essentially, the TAES is tasked with transporting patients, by air, under medical supervision from forward airfields in the CBTZ to HSS facilities in the CBTZ and COMMZ (intratheater evacuation). Patient movement to other theaters or to MTFs in CONUS is the responsibility of USTRANSCOM (intertheater evacuation).
- 2. At a minimum, the establishment of a TAES requires control or development of fixed-wing airfield facilities in the CBTZ and COMMZ (depending on the structure of the theater).

A.6 THEATER AEROMEDICAL EVACUATION SYSTEM MISSION

The mission of the TAES is to transport patients by air, under medical supervision, from forward airfields in the CBTZ to points of definitive medical care within the CBTZ and the COMMZ. Air Force fixed wing common user aircraft will normally operate to evacuate patients in the theater. It can, however, operate as far forward as the C-130 aircraft used for AE routinely operate in support of common-user transportation requirements and where required aircraft support is available.

A.7 THEATER AEROMEDICAL EVACUATION SYSTEM MISSION ASSUMPTIONS

To ensure effective medical regulating and patient evacuation, the MRO/PEO must understand the following basic assumptions used in the development of a TAES:

1. *Intratheater* AE will be accomplished primarily by using retrograde C-130 and C-9 aircraft. Intratheater AE missions will operate using AE equipment (litter stanchions, litter straps, etc.) permanently aboard AE mission aircraft. For deliberate planning purposes, all C-130 aircraft are assumed to be capable of transporting 50 patients , whereas C-9 aircraft are assumed to be capable of transporting 35 patients.

- 2. *Intertheater* AE will be accomplished primarily by using retrograde or dedicated C-141, C-17 or other USAF common user aircraft. When the AE segment of the Civil Reserve Air Fleet (CRAF) is activated, B-767 AE CRAF will be the primary means of strategic AE, with augmentation from C-141s as required.
- 3. Prior to movement, patients will normally have a destination MTF or location identified. Intratheater AE requirements will be coordinated between the MRCC and the JPMRC (or TPMRC). Intertheater AE requirements will be coordinated between the TPMRC and the GPMRC. To the maximum extent possible, patients will be consolidated, based on destination, with missions from interface airfields to reduce subsequent redistribution requirements.
- 4. Patients will enter the AE stabilized, within the capabilities of the originating HSS facility and with required medical equipment (PMI) and enough medical supplies (pharmaceuticals, etc.) to last three to five days.

A.8 THEATER AEROMEDICAL EVACUATION SYSTEM LIMITATIONS

In addition to the above assumptions, the MRO and PEO need to know the limitations that are inherent in the current system:

- 1. There are no physicians routinely assigned to any element of the TAES.
- 2. Patients must be in a stabilized condition prior to being transported to the MASF.
- 3. There may be limited PMI available for exchange with the user service.
- 4. The MASF cannot hold patients longer than 6 hours.
- 5. The MASF does not have the capability to provide patient meals.
- 6. Aircraft are usually not dedicated for intratheater AE. Evacuation is performed through backhaul on logistical aircraft. The availability of aircraft fluctuates greatly due to demand for higher priority flights.
- 7. The MASF relies on the user service (e.g., the Navy) for all other logistical sustainment support.
- 8. The AELTs depend solely on the user service for all logistical support. It is the user's (Navy or Marine Corps) responsibility to provide berthing, messing, and other logistical support.

A.9 ORGANIZATION

- 1. The air component command surgeon serves as the medical consultant for technical guidance and deliberate planning for intratheater AE. The Air Mobility Command Surgeon is the proponent for worldwide AE policy and serves as the medical consultant for technical guidance and deliberate planning for AE.
- 2. The worldwide AE system provides the required airlift and AE resources needed to manage and operate intratheater (tactical), intertheater (strategic), and CONUS (domestic) AE systems. AE elements are available to deploy and provide both the operational AE elements required for mission execution and patient support, and the management elements needed for oversight of the resultant AE structure.
- 3. Theater AE is conducted through an interrelated network that may include the following operational medical elements: AECT, Aeromedical Evacuation Operations Team (AEOT), ASF/MASFs, AELTs, and aeromedical evacuation crews and aeromedical evacuation crew management cells. Related elements required for successful operation of a TAES include the GPMRC, TPRMCs, Service medical regulating agencies, AMC TACC and aeromedical evacuation detachments.

A.10 THEATER AE ORGANIZATION

- 1. The TAES organization is directed by the air component commander. The Air Operations Center (AOC) is the heart of theater airlift operations. The Air Mobility Operations Control Center within the AOC is the focal point for planning, executing, and monitoring theater airlift operations. The AECT within the AOC manages the TAES. The AECT will maintain operational control over all theater AE forces deployed as part of the TAES.
- 2. As the theater airlift system is dependent on strategic air mobility assets and support elements are required by both the theater and strategic systems, the Air Mobility Division within the AOC is the coordinating authority for ensuring fulfillment of theater and strategic requirements.
- 3. Intertheater AE forces are managed by the AMC Tanker Airlift Control Center for intertheater AE missions. The medical management of AE missions will be exercised through the TPMRC (or JPMRC) for intratheater missions and the GPMRC for intertheater missions.

SECTION A4

AEROMEDICAL EVACUATION ELEMENTS

A.11 EMPLOYMENT

The previous section described the TAES organizational structure. In this section, the various elements of the TAES will be described.

A.12 TAES AEROMEDICAL EVACUATION ADVANCED ECHELON TEAM

The Advanced Echelon (ADVON) can provide a cadre of approximately eight personnel who can deploy in advance of other AE command and control elements to arrange required support for the TAES. The team advises the commander and other required personnel regarding AE support requirements. It can assume initial operational command, control, coordination, and communications for the emerging TAES.

A.13 AEROMEDICAL EVACUATION CONTROL TEAM

The AECT is the source of AE operational expertise within the Air Mobility Division of the Air Operations Center. The AECT will coordinate AE operational mission planning, tasking, and scheduling of airlift and AE assets to support patient movement in coordination with the JPMRC. The AECT consists of 19 personnel and requires approximately 10,000 square feet of outside real estate on which to install antennas. It requires full base support, including approximately 85 gallons of fuel daily.

A.14 AEROMEDICAL EVACUATION OPERATIONS TEAM

The AEOT consist of 32 personnel and is responsible for providing operational control and mission management at aerial ports supporting AE operations. It deploys primarily to intertheater interface and CONUS reception airfields and supports all types of aircraft transporting patients. It supports the launch and recovery of AE missions and exercises operational control and crew management over assigned, attached, or transiting AE crews. The AEOT supervises ground handling and on/off loading of equipment and AE kits, to include tracking, re-supply, and monitoring/reporting of current status.

A.15 AEROMEDICAL EVACUATION LIAISON TEAM

The AELT is a six-person element that provides a direct high frequency radio communications link and immediate coordination between the user Service-originating requirements for AE and their respective AECT and PMRC. The team usually consists of two Medical Service Corps officers, one flight Nurse, and three radio operators. AELTs can be collocated directly with a field HSS facility or at any other level of command to ensure a smooth and coordinated patient flow into the TAES. AELTs are dependent on the host facility for all logistic support (except communications equipment) for its personnel and operations. The functions and responsibilities of the AELT are to:

- 1. Facilitate the transmission of patient movement requests to the JPMRC (or TPMRC) and coordinate subsequent patient movement activities among the Service MRCC, MROs, AECT, and JPMRC (or TPMRC).
- 2. Determine time factors involved for the user service to transport patients from service HSS facilities and the designated staging facility (ASF/MASF), and coordinate patient transfer information with the ASF/MASF.
- 3. Assist in assessing the requirements for special equipment and/or medical attendants to accompany patients on the AE.
- 4. Assist supported HSS facilities with AE patient preparation requirements.

A.16 MOBILE AEROMEDICAL STAGING FACILITY

The MASF is a 39-person, mobile, tented, temporary staging facility deployed to provide supportive patient care just prior to a patient's entry into the TAES. Each MASF is capable of routinely holding and processing 50 patients at a time. It is not designed or intended to hold patients overnight or for an extended period. Patients can generally be held from two to six hours. Normally, a MASF will be able to cycle its patient load four times in a 24-hour period (200 patients per 24 hours). However, it can surge to six cycles in 24 hours for a short period of time. MASFs are located near runways or taxiways of airfields or forward operating bases used by tactical airlift aircraft to re-supply combat forces. The MASF does not have any organic beds; therefore, patient holding is accomplished using the litters that patients arrived on at the MASF. Each MASF is deployed with enough supplies and equipment to sustain operations for five days. The MASF is dependent on the local base for logistic sustainment support for its personnel and operations. Staffing of the MASF consists of Flight Nurses, aeromedical and administrative technicians, and radio operators. The senior Flight Nurse is the Officer in Charge and reports to the AECT. There are no physicians assigned to the MASF. Physician support must be coordinated with a nearby HSS facility or AECT. All patient support requirements, including litters, litter straps, blankets, medical equipment, medications, meals, attendants (medical and non-medical), and patient transportation (to and from the MASF) must be provided by the transferring HSS facility. Specific MASF functions include:

- 1. Receives patients designated for AE from user service forward HSS facilities.
- 2. Provides routine, supportive medical/nursing care to patients awaiting AE.
- 3. Prepares patient manifests (if not accomplished by user service or J/TPMRC), patient aircraft load plans, and other administrative support (on a limited basis).
- 4. Assists AE crews in configuring the aircraft for patient transport.

- 5. Notifies the AECT when an AE aircraft has departed.
- 6. Functions as an AEOT when an AEOT is not collocated.
- 7. Provides status/capabilities reports to the AECCT.

A.17 AEROMEDICAL STAGING FACILITY

The ASF is a medical facility (50 to 250 beds) located on or near air bases or airstrips normally designated for intertheater AE interface. ASFs provide patient reception, administrative processing, ground transportation, feeding and limited medical care for patients entering, en route in, or leaving the AE system. ASFs perform all of the functions of the MASF, except that they are not mobile, have access to hospital beds and thus can generally hold patients longer. In addition, ASFs have physicians assigned. The ASF can be organizationally aligned with the AEOT under an AE Operations Squadron to provide a single manager locally for AE support activities at a base. Under such arrangement, the AEOT will have the staging and mission support functions. ASFs can be deployed in increments of 50, 100, 150, or 250 beds.

A.18 AEROMEDICAL EVACUATION CREWS

The basic AE crew consists of five personnel: two flight nurses and three aeromedical technicians. The crew size may be modified based on the type of aircraft being used and/or the projected patient load. Regardless of AE crew size, it will be large enough to provide the requisite in-flight medical management of patients. AE crews provide in-flight supportive nursing care, control and monitor patient onload and offload, and ensure that the aircraft is properly configured to meet patient care requirements. The AE crew can be augmented by a Flight Surgeon (clinical authority for the flight) and can be supplemented by critical care specialists or other individual patient attendants.

SECTION A5

PATIENT PREPARATION FOR AEROMEDICAL EVACUATION

A.19 PATIENT ESSENTIALS

Patients will be transported with their medical records, valuables, personal effects, and other medically essential items. While in theater, patients should also be transported with their Mission-Oriented Protective Posture (MOPP) gear, as applicable. Additional patient essentials may include:

- 1. Patient Medications. The transferring HSS facility should provide a 24-hour supply of medications and other medical supplies for a patient being transported within theater (intratheater AE). For intertheater evacuation, a three to four day supply of required items should be provided.
- 2. Intravenous Fluids. The transferring HSS facility should provide a one-day supply of IVs, including all necessary supplies for antibiotic administration, if required.
- 3. Special Medical Equipment. Transferring HSS facilities should make arrangements with the AE system for special in-flight medical equipment such as cardiac monitors, ventilators, Striker frames, continuous suction units, pulse oximeters, oxygen analyzers, and restraints prior to transferring a patient into the AE system. If arrangements have not been made, the transferring HSS facility will have to provide the required equipment.
- 4. Litter Patients. Litter patients will be provided with a litter, two litter straps, a litter pad, two sheets, a blanket, and a pillow with pillowcase.
- 5. Patient Manifest. A listing of all patients being transported on an AE mission must be provided by the transferring HSS facility on DD Form 601. This form documents pertinent patient information such as patient name, diagnosis, site number, enplaning/deplaning stations, and emergency notification information. The Patient Administration Department of the transferring facility will usually fill out this form.

A.20 PATIENT PREPARATION

The aeromedical evacuation system is a transportation system with limited availability of supplies and equipment. AE crews provide basic supportive care that is necessarily limited by the austere environment of cargo aircraft. It is therefore imperative that originating medical facilities properly prepare their patients for aeromedical evacuation. The decision to transfer a patient by air to another medical facility rests with the patient's physician. The physician should consider the care needed both in

the air (availability of special equipment, cabin altitude) and at interim stops. The physician has responsibility for patient selection, classification, movement precedence, reporting, and preparation.

A.21 PATIENT STABILIZATION

Patients will be stabilized within the capabilities of the referring HSS facility. Every effort will be made to stabilize them to withstand a move to a higher level of care of one to 24 hours. A stabilized patient is one whose airway is secured, hemorrhage is controlled, shock treated, and fractures are immobilized. A stable patient is one for whom no in-flight medical intervention is expected but the potential for medical intervention exists. In some instances, patients moved from a Level II facility may not be clinically stable due to the severity of their wounds, limited clinical capabilities and time constraints and will require more care at a MASF and while in-flight. Common sense and a knowledge of the limited clinical capabilities should prevail in the decision to evacuate the patient. Specific instructions for in-flight care requirements for these patients should be provided to the AE crew. If in-flight physician care is required, this should be pre-arranged with the AE system, or a physician from the referring HSS facility should be assigned to the patient as a medical attendant. Patients being evacuated from Level III and higher should be stable enough to tolerate a 12-hour bed-to-bed move with a low probability of incurring complications requiring invasive treatment or intervention. Patient transfer will usually be from an HSS facility to an AE staging element. Prior to movement, a patent airway must be established, fractures splinted (or if casted, bi-valved), hemorrhage controlled and shock treated. The following should also be considered prior to evacuation: stable vital signs and cardiopulmonary status; stable hemoglobin (10 GMs) or hematocrit (30%); and adequate fluid and hydration status. Additional considerations are provided below for specific conditions:

- 1. Abdominal Injuries. Patients with abdominal injuries should be carefully evaluated by a general surgeon prior to flight. Use of nasogastric and/or rectal tubes should be considered in order to avoid distention frequently encountered with a non-functioning bowel.
- 2. Airway Management. Endotracheal tubes should be used if the patient requires assisted ventilation. Balloon cuffs should be filled with normal saline instead of air, since gas expansion at altitude may cause tracheal damage.
- 3. Cardiac Patients. Patients with severe cardiovascular disease usually have reduced tolerance to hypoxia, but they generally do well during flight if provided supplemental oxygen. Patients with recent myocardial infarctions can usually be moved by airlift with appropriate preparation and monitoring. Unstable patients requiring cardiac monitoring in-flight will be moved with a medical attendant and the referring HSS facility must provide an AE approved monitor.

Note

Patients should be at least 10 days post myocardial infarction and pain free for five days. If monitored, a physician must accompany them.

4. Chest Tubes. Chest tubes should be left in place. However, they will require a Heimlich valve and an underwater chest drainage system approved for AE use (e.g., Argyle, Sentinel Seal, Migada, Pleura Grad,

Thora Drain III, Thora Klex, or Pleur-Evac). Ideally, patients with recently removed chest tubes should not be airlifted until the following conditions are met:

- a. Minimum of 24 hours since chest tube removal.
- b. Normal expiratory and lordotic chest x-ray taken at least 24 hours after removal (just prior to airlift if possible), with an interpretation in the patient's medical record.
- c. An occlusive dressing at the site where the chest tube was removed.
- 5. Circular Casts. Ideally, fresh casts or recent fractures should be at least 48 hours old. All casts should be bivalved unless that would jeopardize the stability of the fracture.
- 6. Colostomy Patients. Extra colostomy bags should accompany the patient. Drainage is more profuse at altitude because of gas expansion.
- 7. Crutches. Patients using crutches should travel by litter because of the safety factors involved in moving about in the unstable environment of an aircraft. The crutches should accompany the patient and will be stowed aboard the aircraft.
- 8. Dressing Changes. As a rule, dressings will be reinforced but not changed during flight due to the relatively unclean in-flight environment. Serious complications such as bleeding, increased pain, or swelling may require wound inspection. However, unique dressings or dressings for patients with excessively draining wounds should be provided by the HSS facility.
- 9. Drug/Alcohol Abuse Patients. These patients should undergo three to five days of detoxification before they are airlifted. An AE mission is not equipped to deal with acute withdrawal symptoms.
- 10. Eye Injuries. Penetrating eye wounds and/or surgery can sometimes introduce air into the globe of the eye, making it susceptible to decreased barometric pressure. An altitude restriction is recommended for such cases, with the exception of patients with retinal detachments.
- 11. Hematological Problems. Ideally, patients should have a preflight HGB of 10 Gm and an HCT of 30 percent. Patients with severe trauma may have readings below those levels, and supplemental oxygen may be required.

Note

HGB can be below 8.5 Gm if condition is chronic and stable, and not due to bleeding.

- 12. Intravenous Fluids. Patients requiring IVs on the ground will normally require them during the flight due to the excessively dry environment. Catheter function should be assessed prior to transport to ensure that catheter is securely in place. Patients requiring antibiotics without fluid replacements should be switched to a heparin lock with heparin flushes provided. A three-day supply of IV fluids should accompany each patient requiring IVs.
- 13. Maxillofacial Injuries. Due to the increased potential for nausea and vomiting, patients with wired, immobilized upper and lower jaws must have a quick-release mechanism applied or have easy access to wire cutters in their possession. Premedication with an antiemetic should be considered.
- 14. Nasogastric Tubes. NG tube insertion is recommended for patients with abdominal wounds, abscesses or obstructions, paraplegia or quadriplegia, or the potential for paralytic ileus. Limited suction capabilities are available. However, the distal end of the tube may be left to gravity drainage into a glove or bag.
- 15. Neurological/Neurosurgical Patients. The decreased partial pressure of oxygen at high altitude can cause increased intracranial pressure in head-injury patients. Low-flow oxygen and an altitude restriction should be considered for flight. Noise, vibration, and thermal stresses can precipitate seizures, and adequate anti-seizure medication levels should be established before flight. The valsalva maneuver increases intracranial pressure. Therefore, a preflight decongestant and PE tube insertion should be considered for comatose patients. Craniotomy patients should be at least 48 hours status post surgery, awake, and alert. Subtle changes in neurological status normally discovered during routine neuro checks are very difficult to detect during flight; patients requiring close observation are poor candidates for aeromedical evacuation. Stable, comatose patients can be transported. Decreased humidity at altitude dictates that patients with loss of corneal blink reflex are provided with bilateral eye patches and eye ointment or liquid tears. Intraventricular monitoring cannot be accomplished during flight.
- 16. Oxygen Requirements. Supplemental (humidified) and emergency therapeutic oxygen are available on all AE missions.
- 17. Psychiatric Patients. Severe psychiatric patients (Classification 1A) require a litter, leather wrist and ankle restraints, and sedation. Intermediate severity psychiatric patients (Classification 1B) require a litter and sedation, and must have restraints available. All litter psychiatric patients must be searched, and all sharp objects such as razor blades and pocket knives must be removed, as part of the antihijacking procedure. Patients must be searched again just before enplaning.
- 18. Stryker Frames. These frames are generally indicated for paraplegia, quadriplegia, cervical fractures, severe burns, and those patients requiring total assistance. Patients having cervical injuries and wearing halo traction may be transported on a regular litter, or they may be transported as ambulatory patients if stabilized. All components of the Stryker frame must be sent to allow continuity of patient care and turning of patients throughout transfer.

- 19. Thermal Injuries. Thermal injuries should be covered with occlusive dressings. Escharotomies are required for full-thickness circumferential burns. Extra burn dressings for in-flight reinforcement should be provided. Limited infusion pumps and poor in-flight refrigeration capabilities preclude the use of total parenteral nutrition. D10W with necessary electrolytes should be ordered as a short-term substitute. Phosphorous injuries should be covered with saline-soaked dressings. Large vesicles and bullae should be protected in-flight through the use of large, bulky dressings.
- 20. Tracheostomy Patients. Tracheotomy tubes should be changed before flight and an extra tube sent with the patient.
- 21. Traction Patients. Free-swinging weights for traction are unacceptable for flight. Cervical traction is available via a Collins traction device, however a physician must be present when the device is applied.
- 22. Urinary Catheters. Indwelling catheters and drainage bags in use before transport should be left in place during evacuation or inserted preflight if urinary retention is a problem. The internal balloon should be filled with sterile, normal saline instead of air to avoid gas expansion during flight.
- 23. Vascular Injuries. Vascular repairs should be clearly recorded on the DD Form 602 or 1380. If casts are applied and they are less than 48 hours old, they should be bivalved and windowed over the injured area in case excessive swelling occurs during flight.
- 24. Ventilators. A respiratory therapist or other appropriate medical attendant will accompany ventilator-dependent patients from the transferring facility.

SECTION A6

PATIENT EVACUATION FORMS

A.22 DD FORM 600, "PATIENT'S BAGGAGE TAG"

A.22.1 General. A DD Form 600 is prepared for and firmly attached to each piece of baggage accompanying patients traveling by military common carrier. When a patient's journey is to be made in several stages, one tag will serve throughout the entire trip, even though the patient may be moved by more than one common carrier. A copy of the patient's travel orders should also be placed inside each piece of baggage to ensure the prompt return of misdirected items. Do not use DD Form 600 for baggage not moving aboard the carrier with the patient. Such items are moved as ordinary unaccompanied baggage in accordance with applicable service directives.

A.22.2 Preparation of DD Form 600. The originating medical treatment facility completes DD Form 600 and firmly attaches it to each piece of baggage accompanying the patient. All blocks on DD Form 600 should be completed EXCEPT the "THRU" blocks prior to the patient arriving at the MASF/ASF.

A.22.3 Receipt for Checked Baggage. Detach the patient's stub from the DD Form 600 and give it to the patient as their receipt for checked baggage. If the patient is unable to safeguard the stub, give it to the senior medical attendant accompanying the patient. As accompanying medical personnel are relieved, the patient's baggage stub(s) is turned over to the succeeding senior medical attendant. At the destination terminal, the accompanying medical attendant delivers the stub to the representative of the destination MTF accepting delivery of the patient.

A.22.4 Disposition of DD Form 600. The Patient's Baggage Tag and accompanying stub may be destroyed when baggage is delivered to the patient or the DD Form 600 is replaced by a local baggage tag and stub at the destination MTF.

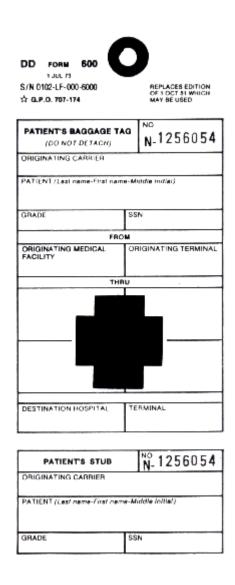


Figure A-1. Sample DD Form 600

A.23 DD FORM 601, "PATIENT EVACUATION MANIFEST"

- **A.23.1 General.** A DD Form 601 is prepared for each patient to be transferred. All patients destined for the same offload terminal may be listed on the same manifest form.
- **A.23.2 Preparation of the DD Form 601.** The originating MTF prepares DD Form 601. The required number of copies is determined locally (or in the OPLAN). Complete this form in accordance with the directions contained on the form and the following instructions:
- 1. Number manifests by Julian date with a number consisting of the last digit of the calendar year and the serial number of the manifest on that day and separated by a hyphen. For example, the tenth manifest issued on 19 December 1995 is numbered "5353-10" with the "5" being the last digit of the calendar year, the "353" being the Julian date for that day, and the "10" representing the number of manifests prepared so far on that day.
- 2. All attendants (medical and non-medical) are identified on the DD Form 601 directly following the information on the patient they are attending. If the en route medical care and surveillance is being provided by only one individual for all patients, the attendant's name and information should be included after the last patient entry. Do not list the patient's attendant as an emergency addressee.
- 3. Enter the term "Prisoner" below the name of the originating MTF for patients in a prisoner status.
- 4. Enter the words "Under Investigation" to identify patients who are under investigation, but not formally charged with an offense.
- 5. Enter the term "DA" to identify patients with a history of drug abuse.

When necessary, deletions and changes should be initialed by the individual who signed the manifest. If a patient who cannot be moved is listed on the manifest, line out all entries pertaining to that patient and initial the change.

A.23.3 Disposition of the DD Form 601. At the loading point, the DD Form 601 is delivered to the senior medical person present. That individual will check all patients and baggage listed on the manifest, note any changes, and return a signed copy acknowledging receipt for all manifested patients and baggage. The originating MTF should maintain a copy of this form for twelve months after which it may be destroyed.

	MIFEST	MANIFEIT NO.	ESTIMATION	D TIME OF DEPY			Barr.		0.00
HEDICAL FACILITY PRIPARING MANIFEST			ORIGINAT	MG TERMINAL			PAGE	OF	PAG
In this column list for each patient the following items in the order indicated: **NAME - GRADE - SERVICE - SERVICE NUMBER DIAGROSS - CLASS OF PATIENT FROM (Medical Judges) - TO (Empilal)			In this column list for each patient the following items in the order indicated: EMERGENCY ADDRESSEE—RELATIONSHIP ADDRESS—TOWN AND STATE DESTINATION FEMALS.						
DOUBLE SPACE BETWEE	***************************************	ENTRIES			BPACE BETWEEN	the second secon	-	E4	

Figure A-2. Sample DD Form 601

A.24 DD FORM 602, "PATIENT EVACUATION TAG"

- **A.24.1 General.** DD Form 602 is the patient's intransit medical record. The attending physician prescribes en route medical care requirements on this form before the patient departs the originating MTF, and all en route treatments are noted on the form during the patient's journey.
- **A.24.2 Preparation of the DD Form 602.** The originating MTF prepares the DD FORM 602, entering all pertinent information except "Cabin or Compartment No." and "Bunk No." This information, when required, is entered by the transporting medical attendant. If a battle casualty does not have a DD Form 1380, "Field Medical Card," attached when picked up, the transporting medical attendant will initiate a DD Form 602 and attach it to the patient. If a patient's journey is in several stages, en route MASF/ASFs use the original tag for recording pertinent medical data and forward it with the patient when they depart for the next leg of the journey.
- 1. Enter complete diagnosis, including only such detail as is useful in caring for the patient during their journey.
- 2. In the "Diagnosis" section, enter in red pencil the terms:
- a. "Prisoner" for patients in a prisoner status.
- b. "Under Investigation" for patients who are under investigation (but not formally charged) for a serious crime.
- c. "DA" for patients with a history of drug abuse.
- 3. Check the space "Battle Casualty" only if the patient actually falls into this category as defined in governing regulations of their service. Patients who are not battle casualties, but under treatment primarily for nonbattle wounds or other injuries are classed as "Injury".
- 4. Enter the same baggage tag number contained on the patients DD Form 600.
- 5. Enter treatment recommended en route in the space provided. En route medication, with dosage as prescribed by the attending physician must be recorded in this section. If a patient requires tube feeding, a copy of the tube feeding formula must be attached to the DD Form 602 to ensure that they receive the same tube feeding throughout the journey.
- **A.24.3 Continued Use of the DD Form 602.** While in the AE system, the medical personnel providing en route medical care use the reverse side of the form to note patient examinations and treatments where such information is not sufficient to justify opening the patient's clinical records. Additionally, treatments administered at en route medical facilities that are ASFs are also annotated. All

treatment entries will include the time that the actual treatment was administered. This entry must be recorded in GMT and indicated by the use of the suffix "Z".

At all intermediate stops prior to arrival at the destination MTF, the name of the facility and dates of the patient's arrival and departure are annotated.

A.24.4 Disposition of the DD Form 602. The destination MTF staples the basic tag of DD Form 602 to a Standard Form (SF) 600 in the patient's clinical record.

7.00	ENT EXACUATION TAG- Tie this top to perions	- Attacher cutte	fiche ac patient	
most (Valled real contest (healtrin	Tie this tag to perion! more facility) a de melament malitus()			
MAME (Law-fire- som (Francis francis	middle initial) le—primiter professor—baltis	he dissatiline prelorsa)		

MINISTER MATERIAL	RANK KATHINI MARANA MARANA	PARTAMAKET I	PERSONNEL Claretor PERSONNEL Claretor	
DIAGNOSTIE DIAGNOSTIE				
e.	MAN TARRE	DISSAIR	Inter commercial	DARY
ia.	TIA	MALADE	DESCRIPTION OF THE PERSON NAMED IN	BUTUNE
18	28	_		
ic .		CARRI DE COM	PARTHERT MO.	HOM MAKES
1	4	MO. CARRIE OV	COMPARTMENT	semps concerns
viii				-10000
TRAS GRAV. HALL	□ Heat	100000000000000000000000000000000000000	MANAGE BARAGE	
MOUNTAIN	BILLIANGO		BANKER Of SERVICES (New Yorks)	
	CHILD BE BOUTE (II advers			is marked
				10 match
TREATMENT RECOGNA- TRACTIONNET RECOGNA- TRACTIONNET RECOGNA- TREATMENT DUT MÉDIC TREATMENT DUT MÉDIC TREATMENT DESP		ement i regulari e e el distant bullament u		Tokas
TRIATINET INCOME TRAITMENT RECOME TRIATINE OF METER TRIATINE OF METER TRIATINE DISTRICT TRIATINE MODULAL	AA OPPICES 24 18/CLAS BIET (Charelle ROSSMI SPIESA (Char	structure to requested as of devices meditensand as of devices of device	amine in this effect for adminish	8478 9479
TRIATINET INCOME TRAITMENT RECOME TRIATINE OF METER TRIATINE OF METER TRIATINE DISTRICT TRIATINE MODULAL	AA OPPICES 24 18/CLAS BIET (Charelle ROSSMI SPIESA (Char	structure to requested as of devices meditensand as of devices of device	amine in this effect for adminish	8478 9479
TREATMENT INCOME TRANSMENT ANCOME TREATMENT ANCOME TREATMENT OF RESPONSE THE RESPONSE THE RESPONSE THE RESPONSE	AA CHINCAR DA CHINCAR DINY COMMON RECORD BIFFICE TAR—	structure to requested as of devices meditensand as of devices of device	amine in this effect for adminish	8478 9479
TREATMENT INCOME TRANSMENT ANCOME TREATMENT ANCOME TREATMENT OF RESPONSE THE RESPONSE THE RESPONSE THE RESPONSE	AA OPPICES 24 18/CLAS BIET (Charelle ROSSMI SPIESA (Char	structure to requested as of devices meditensand as of devices of device	amine in this effect for adminish	8478 9479
TREATMENT RECOMMENT AND COMMENT AND COMMEN	AA CHINCAR DA CHINCAR DINY COMMON RECORD BIFFICE TAR—	one of the second of the secon	amine in this effect for adminish	8478 9479
TREATMENT RECOGNITION TRANSPORT RECOGNITION TO PROPER TO PROPERTY TO	AA CHEECER 24 1951AA Begt Commission of the Com	one of the second of the secon	CHIVES TRANSPO	8478 9479
TREATMENT RECOMMENT RACORMINATIONS OF REGIONS OF REGIONS OF REGIONS OF REPORT REPORT OF REGIONS OF	AL COPPEZE 28 189CTAL BUST CLICATE SE ELOSAM SPÉLAL (Char ELOSAM	on the second of	CRIVES TRANSPORT	8478 9479

Figure A-3. Sample DD Form 602

SECTION A7

CLASSIFICATION AND PRECEDENCE OF PATIENTS FOR AEROMEDICAL EVACUATION

A.25 GENERAL

In order to assure timeliness of movement and proper en route management, all patients will be assigned a patient evacuation precedence and patient classification code.

A.26 PATIENT EVACUATION PRECEDENCE

All patients entering the USAF AE system will be assigned one of the precedences shown in Figure A-4. These precedences determine how rapidly a patient will be moved and should be used within the guidelines provided. Assignment of a higher precedence than needed will slow down the AE system and could result in patients requiring immediate or rapid care being delayed.

PRECEDENCE	DEFINITION
Urgent	Applies only to the need for immediate life, limb, or eyesight saving. These patients should be picked up and delivered to the destination facility with the least possible delay.
Priority	Applies to the need for prompt medical care not available locally. These patients should be picked up within 24 hours and delivered to the destination facility with the least possible delay.
Routine	Applies to all other patients. Routine patients will be picked up and delivered on regularly scheduled flights.

Figure A-4. Evacuation Precedence

A.27 PATIENT CLASSIFICATION CODES

All patients entering the AE system will be assigned to one of the classes listed in Figure A-5. These classes provide the AE crew with information necessary to assist in en route patient management.

CLASS	DEFINITION
	PSYCHIATRIC PATIENTS
Class 1A	Severe psychiatric patient requiring use of restraining apparatus, sedation, and close supervision at all times.
Class 1B	Psychiatric litter patients of intermediate severity requiring tranquilizing medication or sedation, not normally requiring the use of restraining apparatus, but who react badly to air travel or who may commit acts likely to endanger themselves or the safety of the aircraft. Restraining apparatus should be available for use.
Class 1C	Psychiatric walking patients of moderate severity who are cooperative and who have proved reliable under observation.
	LITTER PATIENTS (OTHER THAN PSYCHIATRIC).
Class 2A	Immobile litter patients unable to move about of their own volition under any circumstances.
Class 2B	Mobile litter patients able to move about of their own volition in an emergency.
	WALKING PATIENTS (OTHER THAN PSYCHIATRIC).
Class 3A	Non-psychiatric and non-substance abuse patients who require medical treatment, assistance, or observation en-route.
Class 3B	Recovered patients who are returning to their units and require no medical attention en route.
Class 3C	Ambulatory drug or alcohol substance abuse patients.
	INFANT CATEGORY
Class 4A	Infants under three years occupying a seat or in a bassinet or car seat secured in an ambulatory seat
Class 4B	Recovered infants under three years, occupying a seat or in a bassinet or car seat secured in an ambulatory seat.
Class 4C	Infants in an incubator.
Class 4D	Infants under three years on a litter.
Class 4E	Outpatients under three years on a litter for comfort.
	OUTPATIENT CATEGORY

CLASS	DEFINITION
Class 5A	Ambulatory outpatients, non-psychiatric and non-substance abuse, who are traveling for an outpatient visit and do not require a litter or medical assistance in flight.
Class 5B	Ambulatory drug or substance abuse outpatient going for treatment.
Class 5C	Psychiatric outpatients going for treatment.
Class 5D	Outpatients on a litter for comfort or safety.
Class 5E	Returning outpatients on a litter for comfort or safety.
Class 5F	Other returning outpatients.
	ATTENDANT CATEGORY
Class 6A	Medical attendants, either physician, nurse or technician, who are assigned to give specialized medical treatment or nursing care to a particular patient.
Class 6B	Non-medical attendants, either relatives or friends, who may assist with the patient's care and who may also require support.

Figure A-5. Classification Codes

A.28 CONTINGENCY MEDICAL REGULATING CATEGORIES

A.28.1 General. Contingency regulating procedures eliminate the requirement for patient classification by the medical specialty classifications using the third and fourth characters (BUMEDINST 6320.1 series) and personal data such as name, rank or beneficiary status, service, social security number, International Classification of Diseases (ICD) code, and place of residence. Patients are reported in gross numbers using the eight contingency regulating categories.

A.28.2 Contingency Categories. The categories are: Medical (MM), Psychiatry (MP), Surgery (SS), Orthopedics (SO), Spinal Cord Injury (SC), Burns (SB), OB/GYN (SG), and Pediatrics (MC).

APPENDIX B

Armed Forces Transportation Assets

TYPE TRANSPORT	SERVICE	CAPACITY	LITTER	AMBULATORY	ATTENDANTS
				(SEATS)	
TRANSPORT AIRCRAFT					
C-5 GALAXY	USAF	MAXIMUM	N/A	70	2 FLIGHT NURSES
C-9 NIGHTINGALE	USAF	MAXIMUM	40	40	2 FLIGHT NURSES
		COMBINED	15	24	3 AEROMED EVAC TECHS
C-9 SKYTRAIN	USMC	MAXIMUM	N/A	89	
	USN				5 CORPSMEN
C-21	USAF	MAXIMUM	2	5	2
		COMBINED	1	3	1
C-27 SPARTAN	USAF	MAXIMUM	24	30	4 FLIGHT NURSES
C-130 HERCULES	USAF	MAXIMUM	74	85	
	USMC	COLUDIUED	70	27	2 FLIGHT NURSES
		COMBINED	50	27	
C-141B STARLIFTER	USAF	MAXIMUM	103	147	
		COMBINED	48	38	
		MAX CAPACITY TO DIFFICULT		RALLY USED DUE ATIENT CARE.	3 AEROMED EVAC TECHS
C-17 GLOBEMASTER	USAF	MAXIMUM	36	102	2 FLIGHT NURSES
		COMBINED	36	102	3 AEROMED EVAC TECHS
OTHER AIRCRAFT	1	I	1	I	<u>I</u>
V-22 OSPREY (TILT-ROTOR)	USMC/USN	MAXIMUM	12	24	2 CORPSMEN
U-21 UTE	USA	MAXIMUM	3	10	
		COMBINED		10	1 MEDIC

TYPE TRANSPORT	SERVICE	CAPACITY	LITTER	AMBULATORY	ATTENDANTS
				(SEATS)	
C-12 HURON	USA	MAXIMUM	2	8	
	USAF	COMBINED		8	
ROTARY-WING AIRCRAFT	<u> </u>	l .		•	L
UH-1N IROQUOIS	USMC	MAXIMUM	6	12	1 CORPSMAN
		COMBINED	3	5	1 COM SIMM
CH-46 SEA KNIGHT	USMC/USN	MAXIMUM	15	22	2 CORPSMEN
		COMBINED	6	15	1 CORPSMAN
CH-53D SEA STALLION CH-53E SUPER SEA STALLION	USMC/USN	MAXIMUM	24	37 (55 WITH CENTER LINE SEATING)	
		COMBINED	8	19	2 CORPSMEN
UH-60A BLACKHAWK	USA	MAXIMUM	6	7	
		COMBINED	6	1	1 MEDIC
UH-1H/V IROQUOIS	USA	MAXIMUM	6	9	1 MEDIC
		COMBINED	3	4	
CH-47 CHINOOK	USA	MAXIMUM	24	33	
		COMBINED	8	19	
FIXED WING AIRCRAFT					
C-2 (COD)	USN	MAXIMUM	N/A	28	2 CORPSMEN
P-3 (SUB HUNTER)	USN	MAXIMUM	10	19	2 CORPSMEN
MEDICAL GROUND VEHICLES				•	
M170 4X4 FRONTLINE	ALL	MAXIMUM	3	5	DRIVER ONLY
AMBULANCE (TO BE REPLACED BY M996M1035)		COMBINED	2	3	1 CORPSMAN
M718 4X4 FRONTLINE AMBULANCE (TO BE	ALL	MAXIMUM	3	4	DRIVER ONLY
REPLACED BY M996/M1035)		COMBINED	2	1	1 CORPSMAN
M1010 TRUCK, 4X4 AMBULANCE (TO BE	ALL	MAXIMUM	4	8	
REPLACED BY M997)		COMBINED	2	4	
M792 TRUCK, 6X6 AMBULANCE	USA	MAXIMUM	3	6	DRIVER ONLY
AMBULANCE		COMBINED	2	3	1 CORPSMAN

TYPE TRANSPORT	SERVICE	CAPACITY	LITTER	AMBULATORY	ATTENDANTS
				(SEATS)	
M996 TRUCK, 4X4	ALL	MAXIMUM	2	6	1 CORPSMAN
AMBULANCE ARMORED HMMWV-MINI		COMBINED	1	3	
M997 4X4 AMBULANCE	ALL	MAXIMUM	4	8	
ARMORED HMMMV-MAXI		COMBINED	2	4	1 CORPSMAN
M1035 TRUCK, 4X4	ALL	MAXIMUM	2	6	DRIVER ONLY
AMBULANCE SOFT-TOP HMMWV-MINI		COMBINED	1	3	1 CORPSMAN
BUS, AMBULANCE	ALL	MAXIMUM	20	44	
		CAPACITY VAR	IES BY SIZE	OF BUS	2 CORPSMEN
M113 CARRIER, PERSONNEL,	USA	MAXIMUM	4	10	
FULL-TRACKED ARMORED, WITH LITTER CONVERSION KIT		COMBINED	2	4	1 CORPSMAN
NON-MEDICAL GROUND VEHIC	CLES		-1		
LAV-25, LIGHT ARMORED VEHICLE	USMC	MAXIMUM	N/A	4	CREW ONLY
LAVL, LIGHT ARMORED VEHICLE, LOGISTICS VARIANT	USMC	MAXIMUM	4	7	1 CORPSMEN
AAV, LVPT-7 AMPHIBIOUS ASSAULT VEHICLE, LANDING VEHICLE PERSONNEL	USMC	MAXIMUM	6	21	1 CORPSMAN
M1008 4X4/4X2 TRUCK, CARGO	USA/USMC	MAXIMUM	5	8	
M998 4X4 TRUCK CARGO/TROOP CARRIER	USA/USMC	MAXIMUM	5	6	1 CORPSMAN
M813, M923 TRUCK, CARGO 5 TON	USA/USMC	MAXIMUM	12	20	
RAIL, TRANSPORT	1	1	1	1	
PULLMAN CAR	US FORCES	MAXIMUM	32	48	
SLEEPING CAR	NATO/HOST NATION SUPPORT (CAPACITY VARIES BY NATION)	MAXIMUM	32	32	1 NURSE
AMBULATORY RAILWAY CAR	NATO/HOST NATION	MAXIMUM	24	30	1 NURSE

NTTP 4-02.2

TYPE TRANSPORT	SERVICE	CAPACITY	LITTER	AMBULATORY	ATTENDANTS
				(SEATS)	
CAR	SUPORT (CAPACITY VARIES BY NATION)				
AMBULANCE RAILWAY CAR, PERSONNEL	NATO/HOST NATION SUPPORT (CAPACITY VARIES BY NATION)	MAXIMUM	21	21	2 WARD ATTENDANTS
RAIL BUS	GERMANY	COMBINED	40	16	
WATERCRAFT					
LCVP, LANDING CRAFT, VEHICLE & PERSONNEL	USN	MAXIMUM	17	36	2 CORPSMEN
LCM-6, LANDING CRAFT MECHANIZED	USN	MAXIMUM	30	80	
LCM-8, LANDING CRAFT MECHANIZED	USN	COMBINED LIT/AMB	50	200	3 CORPSMEN
LCU, LANDING CRAFT UTILITY	USN	MAXIMUM	100	400	
LCAC, LANDING CRAFT AIR CUSHION	USN	IN CREW SPACES	3	12	2 CORPSMAN (1 IN EACH CREW COMPARTMENT)
					CORPSMEN AS NEEDD FOR CONFIGURATION

APPENDIX C

U.S. Army Air Ambulance Company

C.1 MEDICAL COMPANY, AIR AMBULANCE

The medical company, air ambulance provides aeromedical evacuation to all categories of patients consistent with evacuation precedences and other operational considerations. Evacuation is effected from as far forward as possible in the AO to HSS facilities located in the rear. Elements of these companies can be assigned to support Navy patient evacuation requirements in a theater of operations. When assigned, they will usually function onboard a hospital ship or from a fleet hospital.

C.1.1 Mission and Capabilities

- 1. The mission of the medical company, air ambulance is to provide:
- a. Aeromedical evacuation support within the theater of operations.
- b. Emergency movement of medical personnel, equipment, and supplies, including whole blood, blood products, and biologicals.
- 2. Specific capabilities of this unit are to:
- a. Operate on a 24 hour-a-day basis.
- b. Evacuate patients based on operational capability (dependent on type of aircraft).
- (1) Operate 15 air ambulances (UH-60A). These ambulances are each capable of carrying six litter patients and one ambulatory patient, seven ambulatory patients, or some combination thereof. Single patient lift capability (per company) is 90 litter patients, 105 ambulatory patients, or some combination thereof. A flight medic provides in-flight medical treatment and surveillance of patients.
- (2) Operate 15 air ambulances (UH-1H/V). These ambulances are each capable of carrying six litter patients and one ambulatory patient, nine ambulatory patients, or some combination thereof. Single patient lift capability (per company) is 90 litter patients, 135 ambulatory patients, or some combination thereof. A flight medic provides in-flight medical treatment and surveillance of patients.

(3) Provide internal/external load capability for the movement of medical personnel and equipment.
(4) Perform aviation unit maintenance (AVUM) on all organic aircraft and organization maintenance on all organic avionics equipment. It also performs unit level maintenance on all organic equipment, less medical.
(5) Provide air crash rescue support and forced entry, less fire suppression.
(6) Operate as an area support medical evacuation (MEDEVAC) section and three forward support MEDEVAC teams to provide flexibility in supporting deployed forces.
c. The unit is dependent upon:
(1) Support elements of the Corps or Theater Army for:
(a) Personnel services
(b) Logistics
(c) HSS
(d) Medical supplies and equipment
(e) Berthing and messing
(f) Communications security equipment maintenance
(2) A supporting aviation intermediate maintenance (AVIM) organization for all AVIM support.
C.1.2 Organization and Functions. The medical company, air ambulance is organized into:
1. Company headquarters.
2. Flight operations platoon consisting of a platoon headquarters, flight operations section, and airfield operations section.

- 3. Aircraft maintenance platoon consisting of a platoon headquarters, component repair section, and maintenance section.
- 4. Air ambulance platoon consisting of a platoon headquarters, area support MEDEVAC section, and three forward support MEDEVAC teams.

C.2 MEDICAL DETACHMENT, AIR AMBULANCE (RG)

The medical detachment, air ambulance (RG) provides a small, flexible AE capability in the theater. These detachments are usually assigned to a Medical Command (MEDCOM) or medical brigade. They can be assigned to other units, as required by the operation.

C.2.1 Mission and Capabilities

- 1. This detachment provides immediate AE of all categories of patients from far forward in the CBTZ to Level III and farther rearward, as required. It also provides AE support of Level III facilities in the COMMZ for movement of patients between the facility and airheads designated for strategic AE.
- 2. The unit operates six air ambulances, each normally configured to carry six litter patients and one ambulatory patient. The single-lift (detachment) capability of the unit is 36 litter and six ambulatory patients.
- 3. The medical personnel assigned to the detachment provide in-flight medical care and surveillance of patients.
- 4. The aircrew provides air crash rescue support, extricates personnel from downed aircraft, and provides emergency medical care at the crash site. Any patients are then evacuated to the nearest HSS facility.
- 5. The detachment provides expeditious movement and delivery of whole blood, blood products, biologicals, and other medical supplies and equipment. It can also rapidly transport medical personnel and equipment when required.
- 6. The flight operations section is staffed for 24-hour continuous operations to receive and coordinate AE requests.
- 7. The detachment can perform limited AVUM on organic aircraft and organizational maintenance on all avionics equipment. It is dependent on a supporting AVIM Company for supplementing AVUM and providing AVIM support.

C.2.2 Organization and Functions

- 1. The medical detachment, air ambulance (RG), is organized with a detachment headquarters, flight operations section, maintenance section, and two air ambulance sections (3 air ambulances each).
- 2. The detachment is dependent on the supported unit for all logistics support.

APPENDIX D

Communications Assistance

D.1 PHONETIC ALPHABET

Difficult words or text in a transmission can be spelled using the phonetic alphabet and preceded by the PROWORD "I SPELL". If the operator can pronounce the word before spelling, he/she will do so before and after spelling the word.

For identifying any letter of the alphabet, the standard phonetic alphabet will be used with its pronunciation as shown in Figure D-1.

LETTER	WORD	SPOKEN AS
ELITER		
A	ALPHA	<u>AL</u> -FAH
В	BRAVO	<u>BRAH</u> -VOH
С	CHARLIE	<u>CHAR</u> -LEE
D	DELTA	<u>DELL</u> -TAH
Е	ЕСНО	ECK-OH
F	FOXTROT	<u>FOKS</u> -TROT
G	GOLF	GOLF
Н	HOTEL	HO- <u>TELL</u>
Ι	INDIA	<u>IN</u> -DEE-AH
J	JULIET	JEW-LEE- <u>ETT</u>
K	KILO	KEE-LOW
L	LIMA	LEE-MAH
M	MIKE	MIKE
N	NOVEMBER	NO- <u>VEM</u> -BER
0	OSCAR	OSS-CAR
P	PAPA	РАН- <u>РАН</u>
Q	QUEBEC	KAY- <u>BECK</u>
R	ROMEO	ROW-ME-OH

S	SIERRA	SEE- <u>AIR</u> -RAH
T	TANGO	TANG-GO
U	UNIFORM	YOU-NEE-FORM
V	VICTOR	<u>VIK</u> -TORE
W	WHISKEY	WISS-KEY
X	XRAY	ECKS-RAY
Y	YANKEE	<u>YANG</u> -KEY
Z	ZULU	<u>ZOO</u> -LOO

Figure D-1. Phonetic Alphabet

D.2 NUMERALS

Like the letters of the alphabet, numerals also have a set format for pronunciation. Numerals are pronounced as shown in Figure D-2.

NUMERAL	SPOKEN AS
1	WUN
2	TOO
3	THU-REE
4	FO-WER
5	FI-YIV
6	SIX
7	SEVEN
8	ATE
9	NI-NER
0	ZERO

Figure D-2. Numerals

D.3 PROWORDS

PROWORDS are pronounceable words or phrases that have been assigned meanings for the purpose of expediting message handling on circuits where radio-telephone procedures are employed. In no case shall a PROWORD or combination of PROWORDS be substituted by the operator for any part of the text in a message.

Figure D-3 is a list of the more common PROWORDS and their prosigns authorized for use on military radio-telephone circuits.

PROWORD	EXPLANATION
ALL AFTER	The portion of the message referenced is all that follows
ALL BEFORE	The portion of the message referenced is that which precedes
BREAK	I hereby indicate the separation of the text from other portions of the message.
CORRECTION	An error has been made in transmission. Transmission will continue with the last word correctly transmitted.
FIGURES	Numerals or numbers follow.
FLASH	This message must be handled as fast as humanly possible. This is the fastest assigned message precedence.
FROM	The address designation/call sign immediately following indicates the originator of the message.
INFO	The addressee designations immediately following are addressed for information.
I READ BACK	The following is my response to your instructions to read back.
THIS IS	This transmission is from the stations whose designation immediately follows.
ТО	The addressee(s) whose designation immediately follows are to take action on this message.
UNKNOWN STATION	The identity of the station that I am trying to establish communications with is unknown.
WAIT	I am pausing for a few seconds.
I SPELL	I will spell the next word phonetically.
MESSAGE FOLLOWS	A message, which requires recording, is about to follow.
IMMEDIATE	This message must be handled within 1/2 to 1 hour. It is the second highest precedence assigned to messages.
OUT	This is the end of my transmission to you and no answer is required or expected.
OVER	This is the end of my transmission to you and response is necessary. Transmit.
PRIORITY	This message must be handled within 1 to 6 hours. It is the third highest precedence assigned to messages.
READ BACK	Read the entire transmission back to me as received.
RELAY (TO)	Transmit this message to the addressee(s) designation immediately following.
ROGER	I have received your last transmission satisfactorily.

ROUTINE	This message must be handled within 24 hours. It is the lowest precedence assigned to messages.
SAY AGAIN	Say again all of your last transmission. Can be combined with ALL AFTER and ALL BEFORE.
SILENCE	Cease transmission immediately. Silence will be maintained until instructed to resume.
SILENCE LIFTED	Resume normal transmission. Only the station imposing it or higher authority can lift silence.
THAT IS CORRECT	You are correct, or what you have transmitted back is correct.
WAIT OUT	I am pausing longer than a few seconds.
WILCO	I have received your message and will comply. To be used only by the addressee that the question was directed.
WORD AFTER	The word of the message that I have referenced is that which follows
WORD BEFORE	The word of the message that I have referenced is that which precedes
WORDS TWICE	Communications are difficult. Transmit each phrase or group of phrases twice. This PROWORD may be used as an order, request, or for information.
WRONG	Your last transmission was incorrect. The correct version is
I SAY AGAIN	I am repeating the transmission or portions indicated

Figure D-3. PROWORDS

D.4 TYPE OF CALL

1. Single Call: One call sign used to one station.

Example: Romeo ONE ALPHA this is Romeo ONE

2. Multiple Call: Each call refers to one station but more than one call sign is used.

Example: Romeo ONE ALPHA, Romeo TWO BRAVO this is Romeo ONE

3. Net Call: One call sign is used to designate all stations on the net.

Example: All Romeo stations, this is Romeo ONE

D.5 SECURITY PROCEDURES

Communications Security (COMSEC) is the protection resulting from all measures designed to deny unauthorized persons information of value which might be derived from the possession and study of telecommunications or to mislead unauthorized persons in their interpretation of the results of such possession.

COMSEC is both a command and an individual responsibility. It consists of the following components:

- **D.5.1 Physical Security.** All physical measures taken to safeguard classified equipment, material, and documents from access and observation by unauthorized personnel. Included are:
- 1. Using classified material only where facilities and conditions are adequate to prevent unauthorized access and/or disclosure.
- 2. When classified documents are removed from storage areas for working purposes, they shall be kept under continuous control of an authorized user, and when temporarily not in use, kept face down or have an approved cover stating the overall classification of the attached material.
- 3. Classified information shall only be discussed where unauthorized persons cannot overhear the conversation. When discussions take place over radios or telephones, these instruments must be secure.
- 4. Preliminary drafts, carbon sheets, stencils, notes, worksheets, computer floppy disks and all similar items will be stored like any other classified information, in a General Services Administration (GSA) approved container. When they are no longer needed, they will be destroyed by an approved method.
- 5. Storage. OPNAVINST 5510.1 series provides uniform guidance on the proper storage of classified information. Essentially, classified information will be stored only in GSA-approved containers.
- 6. Destruction. There are two types of destruction: routine and emergency.
- a. Routine destruction may be accomplished by burning, melting, shredding, smashing, exploding, and chemical decomposition. Regardless of the method, destruction must be complete.
- b. Routine destruction must be witnessed by persons cleared to the level of the material being destroyed. Two witnessing officials are required for the destruction of <u>Top Secret</u> and <u>Secret</u> material. One witness is required for the destruction of <u>Confidential</u> material.
- c. A record of destruction is required for all <u>Top Secret</u> and <u>Secret</u> material. OPNAV Form 5511/12, "Classified Material Destruction Report," is the preferred form for recording destruction. If not available, any means of documenting destruction can be used as long as it contains full information about

the material destroyed (serial number, number of copies, identification of the material (unclassified title)), and is signed by the destroying officials.

Emergency destruction can be accomplished by any of the above methods, or any other method that will render the classified material unusable, unreadable, and unrepairable.

- **D.5.2 Emission Security.** Emission security is that component of COMSEC which results from all measures taken to deny unauthorized persons access to information of value which might be derived from the interception and analysis of compromising emanations from cryptographic equipment and telecommunications systems.
- **D.5.3 Transmission Security.** That component of COMSEC dealing with measures designed to protect electronic (radio, telephone, etc.) transmissions from interception and exploitation by means other than cryptoanalysis. The greatest single source of information available to potential enemies of the United States is plain language transmissions. Single bits of information, although individually unclassified, may provide the key to information of strategic importance when collated with large volumes of transmissions. To minimize the potential of transmission security violations, persons should:
- 1. Send only communications that require rapid transmission for military reasons by electronic means.
- 2. Ensure that messages are short and concise, containing only that information essential for the receiver's understanding of the subject.
- 3. Ensure that the message is properly classified and that it contains the proper precedence.
- 4. Be aware of information that could compromise a military operation, and ensure that if the transmission contains such information, it is properly classified. Such information is:
- a. Unit location or movement
- b. Forewarning of time frame, area, participants or objectives of an operation, mission, or exercise
- c. Area boundaries
- d. Circuit identification in the clear by frequency
- e. Compromise of call sign.

NOTE

Beadwindow is a procedure that brings to the immediate attention of circuit operators the fact that a disclosure of the above type of information has taken place. Specific reporting guidance for Beadwindow is contained in standing orders for each operational area.

D.5.4 Cryptosecurity. Cryptosecurity is the component of COMSEC that deals with the provision of technically sound crypto-systems and their proper use. All personnel who send messages need to be aware of cryptosecurity. Specific guidelines are found in Annex K (Command, Control and Communications) of OPLANs/OPORDs and in various SOPs on communications procedures.

D.6 RADIO PROCEDURES

The following basic rules for radio communications are provided as guidelines. Specific information will be contained in Annex K (Command, Control and Communications) of the appropriate OPLAN/OPORD and SOPs for radio procedures.

- 1. Write message down before transmitting (if possible)
- 2. Transmit as written
- 3. Do not use PROWORDS in the text of a message
- 4. Listen before transmitting
- 5. Transmit to the slowest receiver
- 6. Speak clearly and slowly, using natural phrases
- 7. Pause slightly after each phrase
- 8. Avoid unofficial conversation with other operators: transmitting on a directed net without permission; excessive testing or tuning; transmitting an operator's personal name or unit and call sign together; use of unauthorized PROWORDS; and profane, indecent, or obscene language.
- 9. All references to time in radio and message transmissions will be in Greenwich Mean Time (Zulu), unless otherwise stated in the OPLAN/OPORD.

- 10. Communications operators will use standard radio/telephone procedures and maintain circuit logs at all times. Specific information on circuit logs will be contained in the OPLAN/OPORD.
- 11. Encryption/decryption, authentication, and daily changing of call signs will follow the procedures outlined in the OPLAN/OPORD.
- 12. Voice templates and message format will be as directed in the OPLAN/OPORD.

D.7 MESSAGES

Messages are used to send information from one unit to one or more other units. They are transmitted electronically and can be encrypted. Knowledge of certain elements of message communications is necessary to accomplish the transmission.

- 1. Originator. The originator of a message is the authority (command/activity) in whose name a message is sent. The originator is responsible for the functions of the message releaser and drafter.
- 2. Releaser. The message releaser is an individual authorized by proper command authority to release a message for transmission in the name of the originator. In addition to validating the contents of the message, the releaser's signature affirms compliance with proper message preparation, security classification, precedence, and format. The message releaser will usually:
- a. Establish message center staffing and processing procedures within the scope of their authority
- b. Ensure that all personnel under their control are familiar with message writing and transmission procedures
- c. Ensure that procedures are established and in place for the proper handling of classified messages
- 3. Drafter. The message drafter is the person who composes the message. Among all individuals involved with messages, the drafter is the key to an effective program. The drafter is responsible for:
- a. Proper addressing
- b. Clear, concise composition

- c. Proper application of security classification, special handling instructions, downgrading and declassification instructions as contained in OPNAVINST 5510.1 series
- d. Selection of appropriate precedence
- e. Coordination of message staffing
- f. Accuracy of message content, and any tasking in the message
- g. Ensuring the use of proper format, and that the message is error-free
- **D.7.1 Message Precedence.** Precedence is used on messages to inform receivers of the importance of timely handling and/or response.
- 1. Flash (Prosign Z). The highest precedence. *Requires action as fast as humanly possible*. Usually within 10 minutes of receipt.
- 2. Immediate (Prosign O). The second highest precedence. *Requires action within 1/2 to 1 hour of receipt.*
- 3. Priority (Prosign P). The third highest message precedence. *Requires action within 1 to 6 hours of receipt.*
- 4. Routine (Prosign R). The lowest message precedence. Requires action within 24 hours of receipt.
- **D.7.2 Message Date-Time-Group (DTG).** The DTG of a message is six numbers (consisting of the two-digit date and four-digit time), followed by the single letter for the time zone, followed by the three letter abbreviation for the month, followed by the last two digits of the year. For example, a message drafted at 0943 on the 3rd of April 1994 in Washington, D.C. would have the following DTG 031443ZAPR94.

D.8 SECURITY CLASSIFICATION

The following classifications are the <u>only</u> classifications authorized for use in the U.S. military.

1. Top Secret. Contains information of a nature that unauthorized disclosure of could result in <u>exceptionally grave damage</u> to national security or a military operation.

- 2. Secret. Contains information of a nature that unauthorized disclosure of could result in <u>serious</u> <u>damage</u> to national security or a military operation.
- 3. Confidential. Contains information of a nature that unauthorized disclosure of could be *prejudicial* to national security or a military operation.

D.9 TIME ZONES

The standard times observed around the planet are based on 24 time zones, each encompassing 15 degrees of longitude. The starting point from which all times are measured is Greenwich, England, hence the term "Greenwich Mean Time" and its acronym, GMT.

There are 11 zones in the east (minus) and 11 in the west (plus). The 12th zone, which is on the opposite side of the globe from Greenwich, is actually two zones, each 7 1/2 degrees in longitude straddling the International Date Line.

Each zone represents one hour. For any place within a zone, the time is the same. The zones have designations starting with Z for Greenwich. They range from A to M in the east and N to Y in the west. GMT is usually referred to as Zulu time.

D.10.1 Time Zone Conversion. The creation of time zones provides the tools by which the time at any other location can be determined. All that is required is a time zone chart. The importance of applying this to military operations is obvious. With units spread all over the globe, any statement of time must be followed by a zone designator to provide for a common reference.

Zulu time is the time assigned to messages, unless otherwise specified in appropriate orders. To convert local time to Zulu time, add or subtract the time zone you are in to the local time. (Use the formula Zulu time = local time + or - time zone). Example: it is 1300 in Washington D. C. (Romeo zone +5 hours). Zulu time would be 1300 + 5 hours or 1800 Zulu. If you are in Japan (India time zone - 9 hours) and it is 1300, it would be 0400 Zulu. To convert Zulu to local time, reverse the formula.

D.10.2 International Date Line. The International Date Line (180th meridian) separates the M and Y time zones. Each of these two zones is 7 1/2 degrees of longitude instead of 15 degrees. The date line roughly follows this meridian. Upon crossing the date line, one must add or subtract a day, depending on direction of travel. When crossing the date line towards the West Coast of the United States, subtract a day. When crossing the date line going towards Japan, add a day. For example: when traveling from Japan to the United States, if it is 0600 on the 7th of the month at the instant of crossing, it will be 0600 on the 6th of the month after crossing.

APPENDIX E

Medical Regulating Templates and Reports

E.1 INTRODUCTION

Appendix E contains three sections with examples of various status boards used in medical regulating, voice and message report templates. Actual formats for will be contained in the applicable OPLAN for the operation.

CONTENTS

	Page
Section E1 Examples of Status Boards used in Medical Regulating	XXX
Section E2 Examples of Voice Reports used in Medical Regulating	xxx
Section E3 Examples of Message Reports used in Medical Regulating	xxx

SECTION E1

Examples Of Status Boards Used in Medical Regulating

There are four basic status boards used in the medical regulating process: Facilities Spot Status Board, Medical Regulating Status Board, Blood Status Board, and a Consolidated Joining Report Board. These boards provide the medical regulator and other HSS staff personnel with the capability to view current medical regulating issues and their status at a "quick" glance. These boards are usually made using thermoplastic mounting on a sheet of 1/2-inch plywood. Data is recorded using a grease pencil or erasable marking pen. Some regulators have also made copies of the status board examples contained in this appendix to develop a running log of events throughout the entire operation. They record appropriate changes as they occur and then place them in a binder after recording the information on the actual status boards.

SECTION E2

Examples of Voice Reports Used in Medical Regulating

This section contains examples of templates for voice (radio) communications. As medical regulating uses voice transmissions regularly, reports will frequently be given over the MRN. For actual templates and guidance on secure communications, consult the applicable OPLAN.

FACILITIES SPOT STATUS REPORT

"		ΓHIS IS		,	OVER"
(ADDRESSEE)			(ORIGINA	TOR)	
··	, ·	THIS IS		,	OVER"
(ORIGINATOR)			(ADDRESS	SEE)	
"THIS IS		_, REQUEST	SPOT STA	TUS REPORT	T, OVER"
((ORIGINATOR))			
"THIS IS		_, AUTHENT	TICATE		, OVER"
((ADDRESSEE)				
	, THIS	IS		_, I	
(ADDRE	ESSEE)	(ORIGI	NATOR)		
AUTHENTICAT	ΓE	,0	VER"		
"ROGER, STAT	US REPORT FO	OLLOWS, BRE	EAK"		

DATE, TIME, GROUP :	UN	IIT CALL SIGN:	
REPORT LINE	I SET	ENCRYPTION	DECRYPTION
LINE ALPHA (OPERATING BEDS)			
LINE BRAVO (BEDS OCCUPIED)			
LINE CHARLIE ONE (MAJOR SURG BACKLOG # PT)			
LINE CHARLIE TWO (MAJOR SURG BACKLOG # HR)			
LINE DELTA ONE (MINOR SURG BACKLOG # PT)			
LINE DELTA TWO (MINOR SURG BACKLOG # HR)			
LINE ECHO (PTS FOR LATERAL TRANSFER)			
LINE FOXTROT (PTS FOR EVAC OUT OF AOA)			
LINE GOLF (REMARKS)			

[&]quot;BREAK, OVER"

Figure E-5. Voice Template – Facilities Spot Status Report

CASUALTY EVACUATION REQUEST

···	THIS IS			_, OVER"
(ADDRESSEE)		(ORIO	GINATOR)	
"	THIS IS			_, OVER"
(ORIGINATOR)		(ADD	DRESSEE)	
"THIS IS	, REQUEST	CASU	ALTY EVACUA	ΓΙΟΝ, OVER"
(ORIGINATO	PR)			
"THIS IS	_, AUTHENTICA	ATE		, OVER"
(ADDRESSEI	Ξ)		(ORIGINATOI	R)
	THIS IS	-		_, I
(ADDRESSEE)		(ORIO	GINATOR)	
AUTHENTICATE	, O ^v	VER"		
"ROGER, BREAK"				
REPORT LINE				
LINE ONE	[LOCATION]	-		
(Coordinates of pickup site nonsecure communication mea		ising		
LINE TWO	[MARKINGS]	-		
(Method of marking pickup sinumber(s):	te. Use brevity	code		
1 = Signal light or flashlight;				
2 = Vehicle lights;				
3 = Open flame;				
5 = Panels;				
6 = Pyrotechnic signal				
7 = Smoke signal;				
8 = Signal person;				
9 = Strips of fabric or parachut	e;			
0 = Tree branches, pieces of v together.)	vood or stones pla	aced		

Figure E-6. Voice Template: Casualty Evacuation Request (Sheet 1 of 2)

VOICE TEMPLATE:

CASUALTY EVACUATION REQUEST

REPORT LINE (1	ITEM)			
LINE THREE	[FREQUENCY]			
(Radio Frequency at pickup si nonsecure communication mean				
LINE FOUR	[CALL SIGN]			
(Call sign at pickup site)				
LINE FIVE		<u>UNIFORM</u>	<u>PAPA</u>	<u>ROMEO</u>
(Total number of patients by pre	ecedence)			
LINE SIX		<u>LIMA</u>		<u>ALPHA</u>
(Number of patients by type)				
LINE SEVEN				
(Requested pickup time)				
LINE EIGHT				
(Patient nationality and status. number(s):	Use brevity code			
4 = US Military;				
5 = US Civilian				
6 = Non US Military				
7 = Non US Civilian				
8 = Prisoner of War (POW)				
LINE NINE				
(CBR contamination. Use brevi	ty code number(s):			
1 = Radiological;				
2 = Biological;				
3 = Chemical;				
0 = None				
"BREAK, OVER"				

Figure E-6. Voice Template: Casualty Evacuation Request (Sheet 2 of 2)

BLOOD STATUS REPORT/REQUEST

··	THIS IS		, OVER"
(ADDRESSEE)		(ORIGINATOR)	, - :
	THIS IS		, OVER"
(ORIGINATOR)		(ADDRESSEE)	
"THIS IS	, SEND(ING)	BLOOD STATUS REPO	RT/REQUEST, OVER"
(ORIGINATOR	R)		
"THIS IS	, AUTHENTICA	TE	, OVER"
(ADDRESSEE))	(ORIGINATOR)	
,	THIS IS		I
(ADDRESSEE)		(ORIGINATOR)	
AUTHENTICATE	, OV	ER"	
"ROGER, BLOOD STATUS RI	EPORT/REQUES	ST FOLLOWS, BREAK"	
REPORT LINE (I	TEM)		Note
ALPHA ONE		-	
(DTG at end of reporting period))		2
ALPHA TWO			
(Unit location if changed)			1, 6
BRAVO ONE			
(Number of units on hand)			1, 3
BRAVO TWO			
(ABO/Rh type on hand)			1, 3
BRAVO THREE			
(Latest expiration date by ABO/	Rh)		1, 3
CHARLIE ONE			
(Total number of units tran reporting period)	sfused during	this	1
CHARLIE TWO			
(Total units expended during thi	s reporting period		1

Figure E-7. Voice Template: Blood Status Report/Request (Sheet 1 of 3)

1

BLOOD STATUS REPORT/ REQUEST

REPORT LINE (ITEM)	Note
DELTA ONE	
(Est. total units required over the next seven days)	1, 3, 7
DELTA TWO	
(Est. no. of units by ABO/Rh over the next seven days)	1, 3, 7
DELTA THREE	
(Desired delivery date)	1
DELTA FOUR	
(Delivery destination)	1, 4
DELTA FIVE	
(Receiving official at destination)	1,5

"BREAK, OVER"

NOTES:

- 1. Omit words/lines that are not applicable.
- 2. Report submitted 2400 local time.
- 3. Use a slash "/" marking to report multiple units, groups, or types in the BRAVO set and in the DELTA set (DELTA ONE and TWO).

Example: BRAVO ONE: 10/20/30

BRAVO TWO: APOS/BPOS/OPOS

BRAVO THREE: 10JAN/11JAN/12JAN

This is interpreted as having available:

10 units APOS exp date 10 JAN 20 units BPOS exp date 11 JAN

30 units OPOS exp date 12 JAN

Figure E-7. Voice Template – Blood Status Report/Request (Sheet 2 of 3)

BLOOD STATUS REPORT/ REQUEST

NOTES (Continued):

- 4. Report desired delivered date only if different from LINE ALPHA TWO.
- 5. Give receiving official's name if that person is not the laboratory staff.
- 6. Report unit location on initial report AND only when your unit's location has changed from last report. Give unit location in grid coordinates or LAT/LONG.
- 7. Estimated requirements will be for the day following the last day of supply-on-hand and on order. OPLANS and OPORDS list the supply levels.

Figure E-7. Voice Template: Blood Status Report/Request (Sheet 3 of 3)

SECTION E3

Examples of Message Reports Used in Medical Regulating

This section contains examples of standard message formats used in the medical regulating process. As with the voice template examples shown in the previous section, the applicable OPLAN will contain actual reporting requirements and appropriate information on communications security requirements.

FACILITIES SPOT STATUS REPORT

FM: (MTF)
TO: (MRCO)

FACILITIES SPOT STATUS REPORT AS OF (DTG)

ALPHA: (OPERATING BEDS)
BRAVO: (BEDS OCCUPIED)

CHARLIE: (MAJOR O.R.s)

CHARLIE ONE: (PATIENT BACKLOG) CHARLIE TWO: (HOURS BACKLOG)

DELTA: (MINOR O.R.s)

DELTA ONE: (PATIENT BACKLOG)
DELTA TWO: (HOURS BACKLOG)

ECHO: (PATIENTS FOR LATERAL TRANSFER)

FOXTROT: (PATIENTS FOR EVAC OUT OF AOA)

GOLF: (REMARKS)

NOTE:

- 1. OMIT LINES NOT CHANGED FROM PREVIOUS REPORT. INITIAL REPORT MUST INCLUDE ALL LINES.
- 2. LINES E AND F MUST BE CODED.

Figure E-8. Facilities Spot Status Report

CASUALTY EVACUATION REQUEST

AMBULANCE/BOAT/GROUND EVACUATION REQUEST

FM: (UNIT REQUESTING MEDEVAC)

TO: (MRCO/MRT/PCS)

AMBULANCE/BOAT MEDEVAC REQUEST

SIMULATED/NO PLAY (ACTUAL)

ONE: (LOCATION OF UNIT – GRID COORDINATES)

TWO: (RADIO FREQUENCY, CALL SIGN AND SUFFIX)

THREE: (NUMBER OF PATIENTS BY PRECEDENCE)

(# - 1 – URGENT) (# - 2 – PRIORITY) (# - 3 – ROUTINE)

FOUR: (NUMBER OF PATIENTS BY TYPE)

(# - 9- LITTER)

(# - 10 - AMBULATORY)

FIVE: (REQUESTED PICK UP TIME)

SIX: (PATIENT NATIONALITY AND STATUS)

(4 - US MILITARY) (5 - US CIVILIAN)

(6 - NON-US MILITARY) (7 - NON-US CIVILIAN)

(8 - POW)

SEVEN: (CBR CONTAMINATION)

(9 - NUCLEAR) (10 - BILOGICAL) (11 - CHEMICAL)

Figure E-9. Helicopter/Ambulance/Boat Evacuation Request

BLOOD STATUS REPORT/REQUEST

FM: (UNIT)

TO: (CATF/CLF)

SUBJ: BLOOD STATUS/ REQUEST

1. Pass to blood program officer.

(CODE LINE)	(ITEM)	(NOTE)
ALPHA ONE:	(DTG AT END OF REPORTING PERIOD)	2
ALPHA TWO:	(UNIT/ FACILITY REPORTING)	
ALPHA THREE:	(UNIT LOCATION IF CHANGED)	1,6
BRAVO ONE:	(NUMBER OF UNITS ON HAND)	1, 3
BRAVO TWO:	(EXPIRATION DATE BY ABO/RH OF LATEST)	1, 3
CHARLIE ONE:	(TOTAL UNITS TRANSFUSED DURING PERIOD)	1
CHARLIE TWO:	(TOTAL UNITS EXPENDED DURING PERIOD)	1
DELTA ONE:	(EST NO. UNITS REQUIRED NEXT 10 DAYS)	1, 3, 7
DELTA TWO:	(EST NO.UNITS BY ABO/RH NEXT 10 DAYS)	1, 3, 7
DELTA THREE:	(DESIRED DELIVERY DATE)	1
DELTA FOUR:	(DESIRED DELIVERY DESTINATION)	1, 4, 5
DELTA FIVE:	(RECEIVING OFFICIAL AT DESTINATION)	1,5

- NOTES:
- 1. Omit lines not applicable.
- 2. Report period is as of 2400 local.

Figure E-10. Blood Status Report/Request (Sheet 1 of 2)

3. If the BRAVO and DELTA lines need to be used more than once to report different numbers of units, groups, types, etc., information will be reported by separating with a "/".

Example: BRAVO ONE: 10/20/30

BRAVO TWO: A+/B+/O+

BRAVO THREE: 10JAN/11JAN/12JAN

This is interpreted as: on hand 10 units A+ exp date 10 JAN

20 units B+ exp date 11 JAN 30 units O+ exp date 12 JAN

- 4. Report desired delivery destination only if different from line ALPHA THREE.
- 5. Report receiving official only if other than laboratory personnel.
- 6. Report unit location in grid coordinates when possible and only if changed from last report.
- 7. Normally, estimated requirements will be for the day following the last day of supply on hand and on order. Supply levels will be announced in appropriate plans and orders.

Figure E-10. Blood Status Report/Request (Sheet 2 of 2)

MEDICAL CENSUS REPORT

FM: (UNIT) TO: (CATF/CLF)

SUBJ: MEDICAL CENSUS REPORT FOR MEDICAL REGULATING OFFICER

ALPHA: (MEDICAL UNIT REPORTING) *SEE NOTES 1, 5

BRAVO: (LOCATION IF CHANGED)

CHARLIE: (DTG AT END OF REPORT PERIOD) *SEE NOTE 2

DELTA: (TOTAL OPERATING BEDS AT END OF REPORTING)

*SEE NOTE 3.

DELTA ONE: (ICU BEDS)

DELTA TWO: (INTERMEDIATE CARE BEDS)

DELTA THREE: (MINIMAL CARE BEDS)

ECHO: (TOTAL PATIENTS ADMITTED DURING PERIOD AND BY

SERVICE/CIVILIAN/POW *SEE NOTE 4

FOXTROT: (TOTAL BEDS UNOCCUPIED AT END OF PERIOD)

FOXTROT ONE: (ICU BEDS UNOCCUPIED)

FOXTROT TWO: (INTERMDEIATE CARE BEDS UNOCCUPIED)
FOXTROT THREE: (MINIMAL CARE BEDS UNOCCCUPIED)

GOLF: (TOTAL PATIENTS REMAINING AT END OF PERIOD BY

SERVICE/CIVILIAN/POW) *SEE NOTE 4

HOTEL: (TOTAL PATIENTS RETURNED TO DUTY DURING PERIOD)

INDIA: (TOTAL PATIENTS EVACUATED DURING PERIOD)

JULIET: (TOTAL DEATHS IN FACILITIES DURING PEROID BY

SERVICE/CIVILIAN/POW) *SEE NOTE 4

KILO: (PATIENTS REQUIRING EVACUATION) *SEE NOTE 4

KILO ONE: (PATIENTS READY FOR EVAC NOT PREVIOUSLY REPORTED KILO TWO: (PATIENTS READY FOR EVAC PREVIOUSLY REPORTED BUT

NOT EVACUATED)

LIMA: (UNUSUAL INCIDENCE OR OCCURRENCE OF DISEASE OR

INJURY)

Figure E-11. Medical Census Report (Sheet 1 of 2)

MIKE: (TOTAL OUTPATIENT VISITS DURING PERIOD)

NOVEMBER: (UNRESOLVED MEDICAL LOGISTICAL PROBLEMS)

NOTE:

- 1. SUBMITTED INITIALLY BY EVERY MTF WHEN THEY BECOME OPERATIONAL.
- 2. SUBSEQUENTLY, ALL MTFs MUST SUBMIT REPORT DAILY AT 0500.
- 3. WHEN REPORTING DELTA LINES, REPORT ONLY THOSE BEDS SET UP AND READY TO RECEIVE PATIENTS.
- 4. SUBMIT ONLY THOSE LINES REFLECTING A CHANGE FROM THE PREVIOUS REPORT.
- 5. SUBMITTED IN ADDITION TO THE SPOT STATUS REPORT.

Figure E-11. Medical Census Report (Sheet 2 of 2)

CONSOLIDATED AEROMEDICAL EVACUATION REQUEST

FM: (UNIT)

TO: (MRCO/AELT)

SUBJ: CONSOLIDATED AEROMEDICAL EVACUATION REQUEST

- A. (OPORD/OPLAN/JMRO MSG)
- 1. (UNIT NAME AND LOCATION)
- 2. (PATIENT'S NAME /RANK/SSN/SERVICE/CLASSIFICATION/DIAG)
- 3. (NEAREST FIXED WING AIRFIELD) (SECONDARY AIRFIELD IF AVAILABLE)
- 4. REMARKS
 - A. (MOVEMENT PRECEDENCE)
 - B. (SPECIAL EQUIPMENT REQUIRED)
 - C. (MEDICAL ATTENDANT REQUIRED)
 - D. (OTHER)

NOTE:

- 1. Omit lines not used. Add lines to Paragraph 4 to amplify situations as required.
- 2. Repeat line numbers as required for each separate unit and location in report.
- 3. Ships and MTFs will use the same basic format to report casualties for movement outside the area of operations to the MRCO.

Figure E-12. Consolidated Aeromedical Evacuation Request

MEDICAL JOINING REPORT

FM: (UNIT)

TO: (CATF/CLF)

INFO: (TASK FORCE)

CONFIDENTIAL//N06300//

SUBJ: MEDICAL JOINING REPORT (U)

- A. (OPORD/OPLAN)
- 1. (C) (NUMBER OF DEDICATED OPERATING ROOMS).
- 2. (C) (NUMBER OF OTHER OPERATING AREAS EQUIPPED WITH SUITABLE EQUIPMENT NEEDED FOR THE PERFORMANCE OF BASIC SURGICAL PROCEDURES).
- 3. (C) (NUMBER OF FIXED X-RAY MACINES).
- 4. (C) (NUMBER OF PORTABLE X-RAY MACHINES).
- 5. (C) (NUMBER OF REFRIGERATORS IN SICKBAY SUITABLE FOR WHOLE BLOOD STORAGE /TOTAL CAPACITY OF SAME IN BLOOD UNITS).
- 6. C) (NUMBER OF BLOOD UNITS ON HAND LISTED BY ABO/RH TYPES).
- 7. (C) (NUMBER OF WALKING BLOOD DONORS ON HAND LISTED BY ABO/RH TYPES).
- 8. (C) (NUMBER OF ICU BEDS AVAILABLE).
- 9. (C) (NUMBER OF OTHER SICKBAY BEDS AVAILABLE).
- 10. (C) (NUMBER OF OVERFLOW BEDS SUITABLE FOR CASUALTY CARE).

DECLAS: OADR

Figure E-13. Medical Joining Report

APPENDIX F

Post Deployment Critique

F.1 GENERAL

The PDC is a report of significant occurrences during a deployment. The operational commander records the various medical regulating and patient evacuation activities during the deployment and documents areas needing further evaluation.

F.2 PREPARATION AND SUBMISSION

Either the medical regulating officer/patient evacuation officer or force surgeon prepares the PDC. Following completion, the PDC is submitted to the Bureau of Medicine and Surgery via the chain of command as follows:

- 1. The Task Force Commander
- 2. The numbered fleet commander, if applicable
- 3. The Navy Component Commanders of the geographical Unified Commands (PACFLT, LANTFLT, NAVEUR, NAVCENT (Rear and Forward), NAVSPECWARGRU- as applicable)
- 4. Chief of Naval Operations (N931)

Advance copies are sent to:

- 1. The Chief of Naval Operations (N931)
- 2. The Commander in Chief Pacific or Atlantic Fleet (as applicable)
- 3. Bureau of Medicine and Surgery (MED-02)
- 4. Armed Forces Medical Intelligence Center

F.3 PURPOSE

1.	The critique documents significant events relative to deployment experiences and includes at least the
fol	lowing:

- a. Background of deployment evolution, including pre-deployment visit and workup dates
- b. Principal activities (including dates) during the deployment
- c. Problems encountered and resolutions (or recommendations for unresolved problems)
- d. Overall assessment of the contribution to the mission
- e. Lessons Learned
- 2. The following should be provided as enclosures:
- a. Specific recommendations
- b. Rosters of medical regulating and patient evacuation personnel
- c. Workload summary
- d. Evaluation of medical care

APPENDIX G

Lessons Learned Process

G.1 NAVY INSTRUCTIONAL INPUT PROGRAM

1. The NIIP complies with both the Navy and Joint programs for submission of Navy Lessons Learned to all current JOINT Chiefs of Staff (JCS) after action reporting requirements and is the single software for Learned data bases (NLLS, JULLS, etc.). The CD-ROM containing the NIIP software can be ordered from:

Director (Attn: NTIC Coordinator) Navy Tactical Support Activity Washington Navy Yard Bldg. 200 901 M Street SE Washington, DC 20374-5079

Commercial (202) 433-3678 DSN 288-3678 FAX (202) 433-6749

- 2. Letters should contain both a "need to know" certification and a statement that the command has the proper facilities/capability to safeguard classified material to at least a minimum of Secret. For hardcopy submission, see paragraph H-2 of this Appendix. NIIP shall be used by all Navy commands to submit Lessons Learned, including those on Joint issues. NIIP menus provide formatted fields to create Lessons Learned files that can then be automatically converted into a standard computer format acceptable to any of the currently approved Lessons Learned data bases.
- 3. Lessons Learned are submitted to the appropriate Navy Lessons Learned validation site via the submitter's operational immediate superior in command (ISIC) or via the command designated by the operation or exercise (officer in tactical command or officer conducting the exercise). Two methods are available for submitting NIIP created Lessons Learned:
- a. By Message The NIIP message menu option may be used to create an MTF GENADMIN message.
- b. By Mail Floppy disks of NIIP Lessons Learned may be mailed.

Consult NIIP help screens for more information and a list of validation sites.

G.2 HARDCOPY SUBMISSION

Lessons Learned may be completed in hardcopy format (as follows) and submitted through the chain of command:

G.3 LESSONS LEARNED WRITTEN SUBMISSION FORMAT

1. Overall Classification:

(Classified at the level of the highest single item of classified information contained in the report)

2. Exercise/Operation:

(Name of exercise or operation. It is usually two words in length and in the case of exercises, includes the last two digits of the fiscal year; e.g., SOLID SHIELD 90).

3. Completion Date:

(Date of observation. If Lessons Learned were over a period of time, use end of exercise/operation/deployment. Provide start and end dates in discussion paragraph.)

4. Submitting Command:

(The Command that observed the Lessons Learned. Ships use hull type and number. TF/Group/Unit/Element Commanders use short title and provide administrative title in the comments paragraph; other commands use message PLAD without the geographic location, unless absolutely required (COMNAVSURFPAC).)

5. Tel: DSN Comm Observer:

(Telephone numbers of the point of contact.)

Observer: (Name of the point of contact.)

6. Title:

(Should reflect both the subject area and nature of the problem. Title should be less than 75 characters long and should be in an UNCLASSIFIED format).

7. (Classification) Observation:

(A short summary statement of the problem or action. Details are presented in the discussion.)

8. (Classification) Discussion:

(Amplifies observation and answers who, what, when, where, why, and how questions about observation.)

9. (Classification) Lesson Learned:

(Describes the positive action taken, or identifies the local/temporary solution to the problem; suggests a new procedure entirely or a procedure despite the problem.)

10. (Classification) Recommended Action:

(A statement on how to permanently correct the problem and identifies who makes the correction. The Lesson Learned could require new or modified publications, procurement of new equipment, changing force structure, revising command relationships, improving training, etc.)

11. (Classification) Comments:

(Other information the submitting command wishes to add. Include any reference information here.

a. Letters: originator/SSIC/ser#/date;

b. Messages: originator/DTG;

c. Publications: short title (NWP)